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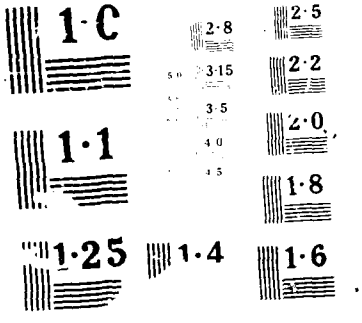
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An extensive wind tunnel study of flows with transonic swept separation zones and shock-boundary layer interactions on realistic stationary and spinning projectile test models has been conducted in the NASA Ames 6- by 6-ft. Supersonic Wind Tunnel. These studies provide a detailed data base to assess the potential effects of symmetric and asymmetric three-dimensional transonic flow separations on projectile performance. A three-component laser

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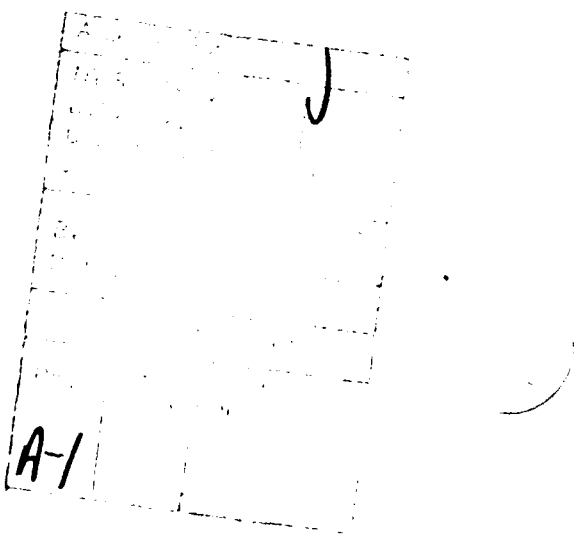
velocimeter system, laser vapor screen, model balance and static and dynamic surface pressure gages have been used to conduct detailed non-intrusive wind tunnel test measurements. This instrumentation has been used to determine model forces and moments, surface pressure distributions and to explore the time-averaged and turbulent characteristics of the attached viscous and coiled free shear layers over ranges of angle of attack and transonic freestream Mach number. Flow field and aerodynamic static and dynamic surface pressure measurements have been obtained on a stationary projectile model and normal and Magnus force and flow field measurements have been made on a geometrically similar spinning model. A comparison of the two sets of three dimensional lee side flow field surveys shows that model spin produces significant changes in vortex position and strength which accounts for the measured destabilizing aerodynamic effects in the transonic test regime.



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Introduction

Although artillery projectiles are usually launched at high supersonic speeds, most flight envelopes require that they also fly at high subsonic and low supersonic velocities. This flight regime is often of critical importance since it usually represents the conditions during which the maximum destabilizing aerodynamic effects occur: the so called critical Mach number range. Thus a knowledge of projectile lift, drag, and moment coefficients at transonic speeds is imperative if range, payload and accuracy are to be optimized. Of these forces and moments, drag is the most difficult to predict, since it is more influenced by viscous effects especially if separation, whether shock-induced, pressure-gradient-induced, or geometry-induced is present. As the theories used to predict drag must take into account viscosity, they are more complex than potential flow methods which are usually used to predict the other forces and moments. If local flow separations occur prediction techniques become even more complex.

To achieve drag reduction and increased range artillery projectile designs with long, slender ogives, boattailed afterbodies and increased lengths have evolved. The increased lengths were necessary since drag reduction efforts resulted in decreased payload volume. In transonic flight the flows about these bodies are extremely complicated. Fig. 1, taken from Ref. 1, shows the general transonic flow features of a typical shell configuration at zero incidence. It can be seen that the surface discontinuities at the ogive-cylinder and cylinder-boattail junctures generate local supersonic expansions which terminate in complex shock wave-boundary layer interactions. These interactions may lead to local regions of flow separation which could significantly affect aerodynamic performance. Unfortunately, the interaction between a shock wave and a turbulent boundary layer is one of the most

important, but still far from resolved, problems in fluid mechanics. The region of influence of the interaction is a strong function of Reynolds number, boundary layer thickness and shock strength (pressure gradient). Since these interactions normally have large-scale time-dependent characteristics, their detailed understanding requires advanced measurement techniques. Lack of sufficient experimental data has inhibited progress in the detailed numerical simulation of these flows.

At angle of attack the situation is further complicated since axial symmetry is destroyed and cross flow, pressure gradient induced flow separation occurs. The shock on the windward surface of the boattail moves farther aft than the shock on the leeward surface. This pattern generates a force on the boattail tending to overturn the shell. Modeling of the resultant lee side flow poses additional problems since the development of turbulent flow structures in the three dimensional swept separation zones and in the tightly coiled free shear layers are virtually unexplored. Despite these problems, the computation of symmetric separated lee side flow fields is being attempted. Two principal approaches are involved, namely: parabolized approximations to the Navier Stokes equations for supersonic flows and time independent Navier Stokes equations for transonic calculations.

Once the relative incidence, i.e. the ratio of the angle of attack to semi-nose angle of the body, exceeds 1 or 2 for slender conical or tangent (secant) ogive nose shapes, the orientation of the forebody vortices becomes asymmetric with respect to the meridian plane. These flows can give rise to significant, and on occasion disastrous side forces and yawing moments. Modern spin stabilized projectiles often fly at moderate incidence where relatively extensive leeward vortex flows are present. Spin stabilization produces boundary layer distortion and asymmetric vortex flow. As projectile lengths have been increased to reduce drag, the potential for Magnus-induced

instabilities has also increased. Methods of predicting Magnus effects have been sought for many years. In supersonic flow, extensive comparisons between computation and experiment have shown significant differences which have been attributed to inaccurate modeling of the leeward vortex flows (Ref. 2).

These differences were primarily apparent in test cases where the model angle of attack exceeded 6 deg. At transonic speeds, comparisons are few since, in addition to computational difficulties, there is little experimental data. The experimental determination of the three component velocity distribution is especially difficult. Measurements with total head and hot wire probes must be suspect due to the ever present problem of flow interference except in the locally supersonic regions. Further, the interpretation of hot wire signals is still largely unresolved (Ref. 3). To date, no flow field data are available for comparison with computations (Ref. 4).

However, the development of laser velocimetry and improved analytical methods now offer the capability for the measurement and prediction of detailed flow fields and wake geometries induced by model spin at transonic speeds. The purposes of this research were to demonstrate the potential of a new three dimensional laser velocimeter for the transonic measurement of slender body flow fields, to identify the effects of spin rate and to provide challenging test cases of aerodynamic surface pressure, force and moments and lee side flow field measurements for computation. The model configurations and test conditions were chosen to complement a series of wind tunnel tests conducted by the Ballistics Research Laboratory (Refs. 5 and 6) and to extend earlier supersonic measurements on a smaller model (Refs. 7, 8 and 9) to the transonic speed regime. In the current experiments, the aerodynamic forces and moments as well as lee side velocity profiles were obtained on a spinning and stationary model. Time averaged and unsteady surface pressure

distributions were also measured on a geometrically similar instrumented stationary model.

Experimental Details

Test Models and Facility

Details of the spinning secant ogive-cylinder-boattail test model and model coordinate system are shown in Fig. 2. The model was 6 calibers long with a 1 caliber, 7° boattail, and closely resembled a modern low-drag artillery projectile. The secant ogive forebody was 3.017 calibers in length and was generated as the segment of a circle having a 18.880 caliber radius and a center at model station 4.584 caliber with a lateral offset of 18.315 caliber from the model axis. The cylindrical center body was 1.980 calibers in length and the boattail was a 1.007 caliber, seven degree half angle frustum cone. Both sharp and blunt tip configurations were tested, and to ensure turbulent flow, two brass boundary layer trip rings were put on the ogive at model stations 0.751 and 0.791 calibers. The model was mounted on a dog-leg sting such that it could be coned relative to the oncoming flow. The outer shell of the model was free to rotate about its longitudinal axis by means of two ball bearing mounts. The inner race of the ball bearings were mounted on a non-rotating sleeve that fit over the free end of the balance-strut assembly. Details and photographs of the model installation are shown in Figs. 3 and 4. For the spinning tests, the model was driven by an air turbine which was installed on the strut behind the six component strain-gauge balance BRL(SB228B), which was used to measure the aerodynamic forces and moments. A schematic and parts description of the turbine air supply and braking system are shown in Fig. 5 and Table 1.

The tests were conducted in the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel at freestream Mach numbers of 0.8, 0.94 and 1.2. This facility is a

closed circuit, single return tunnel equipped with an asymmetric sliding-block nozzle and a test section with a perforated floor and ceiling for boundary layer removal during transonic operation. The model angle of attack ranged from 0 to 10 deg. at spin rates (pd/U) of 0, 0.2, and 0.3. The freestream unit Reynolds number was $3x10^6$/ft. Laser vapor-screen studies were undertaken to identify the extent of vortex asymmetry caused by model rotation, to determine the effect of nose bluntness, and to define the regions of interest for the laser velocimeter measurements. Three-dimensional shear layer and wake measurements were then obtained at several model stations on the cylindrical body and the boattail. At each station, the model was coned around the axis of the dog-leg sting so that scans could be made at different circumferential locations. In addition, model balance data were taken to determine Magnus force and moment coefficients. The moments were referenced to an assumed center of gravity located 3.6 calibers from the nose.

To provide a thorough pressure measurement data base, a geometrically similar pressure model was designed and fabricated with steady state pressure orifices at 51 axial locations arranged in two rows 180 degrees apart along the body. Dynamic pressure transducers were similarly arranged at 21 axial locations in two rows offset by 90 degrees from the steady state pressure orifices. The pressure orifices were closely spaced in the regions of anticipated large pressure gradients and unsteady flow, namely at the ogive-cylinder and cylinder-boattail regions. A roll mechanism providing ±180 degrees of movement allowed circumferential pressure distributions to be obtained. Readings were taken at 2.5 degree increments to provide adequate circumferential resolution.

The model was carefully designed and fabricated to reduce orifice-induced static pressure errors. The holes were machined orthogonal to the model surface and, since static pressure measurements are very sensitive

to burrs, care was taken to assure smooth, sharp edged orifices. The measured pressure decreases toward the true value as the hole size and the ratio of hole length to diameter decrease. However, hole diameters less than .015" are difficult to produce with sharp edges and negligible burrs, and the response time is greater. Thus, smooth sharp edged orifices of .020" diameter were specified for the steady state pressure orifices. To compromise on response, the hole length was chosen to be about 3 orifice diameters. Details of the static pressure hole geometry are shown in Fig. 6.

Design objectives for the fluctuating static pressure orifices were to obtain good frequency response while minimizing error producing factors. The orifice was kept small (.030 ") and short (.010") to avoid cavity resonances within the measurement range. The gage reference cavities were all connected to a common tunnel static reference tube. By applying known pressures to this reference line the dynamic pressure transducers could easily be calibrated. Details of the cavity design are shown in Fig. 7. In order to simplify fabrication, both the steady state and dynamic pressure orifices were made from brass plugs and installed in the model prior to final surface finishing.

The axial locations of the surface static pressure measurement positions are shown in Fig. 8 and tabulated in Table 2. The static pressures were recorded using 2-48 port PSI modules. The static pressure fluctuations were recorded on magnetic tape for on line and subsequent analysis. The model, which was designed for aerodynamic loads up to 20 degrees angle of attack at a dynamic pressure, Q of 960 psf, was mounted on a 1.5" Task balance, an Ames straight sting and the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel roll mechanism (see Fig. 9).

The Laser Velocimeter System

The flow field studies were conducted using a new, three component

laser velocimeter system designed and built for the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel. The three component laser doppler velocimeter sending and receiving optics are shown schematically in Fig. 10. Optical access for this fringe mode, forward scatter system was provided by two 4 ft. diameter windows, one on each side of the test section. The 4880 and 5145 angstrom lines from a 15 watt argon-ion laser were separated by a dispersing prism. Quartz acousto optical Bragg cells, driven at 40 MHz were used as beamsplitters and frequency shifters for both the blue and green beams. The output of each Bragg cell, an incident and first order beam, was a diverging pair. These two pairs were further separated and brought parallel by specially polished, off square cubes. With this approach, originally implemented by Owen (Ref. 10), most of the laser power in each line was used. It was also relatively easy to balance the power in each pair by adjusting the Bragg cell angle or the output power from the driver. The pairs of blue and green beams were then made orthogonal by means of a sectional mirror and travel parallel to the mechanical axes of the traverse system. Thus, the bulk of the optics and laser were fixed so that only light weight components needed to be moved during a test. This significantly reduced the cost and complexity of the traverse system.

A dove prism (not shown) provided the capability to rotate the four beam cluster to maintain appropriate model coordinate orientation as the model was moved or beam entry angles changed during a test. After the prism, the beam separations were then increased to approximately 2 inches using rhomboid pairs. After the beams had been steered by all the traversing mirrors, a beam-splitter separated half the power of the green pair for the third component. Thus, the two pairs of green beams had a minimum number of different optical components and shorter independent optical paths. This self-aligning optical characteristic was essential for three component coincident

measurements over long distances in harsh environments.

Polarization rotators were then used to separate the two green pairs by 90 deg. After provision for beam steering wedge prism pairs, the beams were focused down in the test section with 2 meter focal length achromatic lenses. The 4880 angstrom pair measured the vertical component directly. The 5145 angstrom pairs were offset by an angle of 23 deg. so that each pair measured the same component of the stream velocity but opposite signs of the cross flow component.

Scattered light was collected in an off axis forward direction since this greatly improves particle sensitivity and signal to noise ratio. The first receiving assembly was designed to collect light on the bisector of the two transmitting axes. This led to a small, but unacceptable, amount of cross-talk between the two green pairs. Effective elimination of this problem was accomplished by collecting each green pair signal independently, as shown in Fig. 10. In this configuration, each collecting lens was more on axis with its own transmitting pair. This not only removes cross-talk, but also significantly improves the signal to noise ratio. Scattered light from the two green pairs was separated by polarized filters as well as by collection angle. The scattered blue light was isolated using an edge filter. Narrow bandpass and spatial filters eliminated undesired scattered and background light from each channel. The signals were detected by photo-multiplier tubes, amplified and sent to a counter processor. Both sending and receiving optics were mounted on independent, vibration damped tables. Traversing in three dimensions was accomplished by microprocessor controlled, stepper motor driven lead screws.

Modifications could also be made to the sending optics so that either line may be passed through a plane cylindrical lens system. This produced a variable, thin sheet of laser light which was used to illuminate water vapor introduced into the stream. This vapor-screen flow visualization was used to

determine the qualitative effects of model spin rate and to identify the regions of primary interest for subsequent laser velocimeter studies.

Maximum optical system sensitivity is essential for meaningful measurements particularly in large facilities. In these applications, solid angle light collection is reduced so that there is always the possibility that only the velocities of larger particles, which may not follow the flow, will be observed. This could result in errors in the mean flow and turbulence measurements and difficulty in obtaining data in vortex cores. Previous measurements have stressed the value of forward scatter optical systems whenever possible, since data rates which are orders of magnitude higher than those in the back scatter mode can be achieved. Rather than relying entirely on natural aerosols for the light scattering, it was found that the introduction of artificial aerosols of known size distribution greatly enhances data acquisition rates. Such aerosols were generated with an ultrasonic nozzle mounted in the facility. These aerosols have been found adequate for turbulence studies of shock boundary-layer interactions and vortex flows at transonic and supersonic speeds (Ref. 3). In the present experiment, seeding was achieved using a Sonimist (model 700) which was installed in the center of the final set of turning vanes immediately upstream of the settling chamber. The seeder was controlled by an air pressure valve actuator located in the control room (see Fig. 11).

Experience has shown that reliable optical traverse capability and real time data analysis is essential for cost effective studies of turbulent flow fields in large-scale facilities such as the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel, where test time is limited and expensive. To this end, a computer controlled encoder position indicator system and a data acquisition system and software capable of on-line data reduction and display were built, tested and used during the wind tunnel test programs. Traversing in three dimensions

was accomplished by microprocessor controlled, stepper motor driven lead screws (Fig. 12). Optical encoders feed back position information to a desk-top computer so that immediate corrections for backlash or slippage on any axis can be made. In addition to computer software, the data reduction system consists primarily of two elements: an event synchronizer and a desk-top computer as shown in Fig. 13. Each individual realization and essentially simultaneous arrival time is recorded. The coincidence requirement ensures that the velocities are obtained from the same particle. This is a necessary condition for shear stress measurement. Each data point taken by the processor contains the information required to calculate the instantaneous velocities u, v, w. From these determinations, the average velocities $\overline{u}$, $\overline{v}$, $\overline{w}$, turbulence levels u',v', w' and the turbulent cross correlations $\overline{u'v'}$, $\overline{v'w'}$, $\overline{u'w'}$ are all calculated. Plots of these parameters are displayed on-line as profiles are measured and hard copy is available as required. All the raw and reduced data are stored on flexible disks for permanent storage and retrieval. Real time histograms and probability densities of all three velocity components are displayed during data acquisition.

Results

Force and Moment Measurements

The overall effects of boundary-layer growth and incidence on the development of the normal forces and pitching moments are shown in Fig. 14. At low incidence, there is a favorable circumferential pressure gradient all the way from the windward to the leeward generator. Consequently, the boundary-layer grows in a regular manner and develops very small cross flows. The normal force and pitching moments develop linearly in this range, and the slopes are affected only slightly by viscous effects. However, at the higher angles of attack, there are substantial developments of non-linear lift

and pitching moment consistent with the formation of well-organized, symmetrical, coiled, free shear-layer flows on the lee side of the model.

The quantitative effects of model spin rate were determined from Magnus force and moment measurements. Data were obtained at 2 degree increments over the entire angle-of-attack range. At each angle, the model was driven to its maximum spin rate using the air turbine, then the turbine was shut off, and balance measurements were recorded as the model was coasting down from its maximum spin rate. Examples of the side force coefficient measurements at two different angles of attack are shown in Fig. 15, where it can be seen that the Magnus effects are accentuated at higher angles of attack when the vortices are strongest. The linear fits to the subsonic side force data could be forced through zero for zero spin rate. However, at the supersonic test conditions, test section flow angularity introduced by the sliding nozzle block produced a zero spin side force. This offset corresponded to a side wash angle of less than 0.5 deg. Linear fits of all the side force and yawing moment data have been made, and summary plots developed to determine the slopes of the Magnus force and moment coefficients. A direct comparison of the present slope of the Magnus force coefficient is made in Fig. 16 with the data from Ref. 6.

In the present experiment the Magnus moment was referenced to the nose so that the data were transformed to the center of gravity position to be consistent with Ref. 6. The transformation used was

$$(C_{n_{p\alpha}})_{CG} = (C_{n_{p\alpha}})_{x=0} + (C_{y_{p\alpha}}) \frac{l}{d}$$

Comparisons of the slope of the Magnus moment coefficient are shown in Fig. 17. As anticipated, these comparisons show that the Magnus effect becomes more accentuated in the transonic speed range with a maximum value indicated close to Mach one. A complete listing of the force and moment data is

given in Appendix 1.

Surface Pressure Distributions

The flow over the test model at transonic speeds is characterized by mixed regions of subsonic and supersonic flow. Shadowgraphs show that two separate shock waves occur which are preceded by supersonic flow expansions at the ogive-cylinder and cylinder-boattail regions. The surface pressure coefficient data measured on the windward and leeward rays are shown as a function of longitudinal position in Figs. 18-20. These data clearly show the two expansions and recompressions which occur over the model. At subsonic speeds the strengths of these interactions increase with increasing Mach number and angle of attack. Clearly the primary lifting elements are the forebody and boattail surfaces. However, the nature of the interaction in the boattail region on the windward side is such as to produce a destabilizing force on the boattail surface. At supersonic speeds, the nature of the windward and leeward axial pressure distributions is changed significantly. In these cases (Fig. 20) there is no upstream disturbance propagation. This results in rapid supersonic expansions at each of the two model discontinuities and gradual pressure recovery over the cylinder and boattail surfaces. Once again there is a destabilizing force distribution on the model and there is a significant lift force on the front half of the cylindrical surface at the higher angles of attack.

Comparisons of the subsonic and supersonic axial pressure distributions point to significant differences between the two flow regimes. In subsonic flow, disturbances are free to propagate in all directions. This enables upstream propagation of disturbances which are generated at the two model surface discontinuities. In the subsonic cases, flow expansion begins well upstream of the ogive-cylinder and cylinder-boattail junctions which is in sharp contrast to the rapid expansions in the supersonic test cases. These

characteristic differences illustrate the problems in the computation of transonic flows. In the supersonic flows the disturbances are swept downstream, ie. there is no upstream propagation which enables space marching computational techniques to be applied. Space marching methods require much less computer storage and CPU time for full flow field simulation.

Global surface static pressure features have been obtain from additional measurements which were made of the axial surface pressure distributions at roll angle increments of 2.5 deg. These data were used to generate a series of surface pressure contours for the test range of model angle of attack and freestream Mach numbers. These data, namely local pressure level (p), axial model location (x) and roll angle (ϕ) were used to generate a three dimensional picture of the surface pressure levels. The three dimensional model surface geometry was generated using the axial pressure tap location x and the roll angle ϕ and was described as:

$0 \le \phi \le 360$	$0 \le x \le 3.017$	$y = ((18.88^2 - (4.584 - x)^2)^{0.5} - 18.315) \sin \phi$
		$z = ((18.88^2 - (4.584 - x)^2)^{0.5} - 18.315) \cos \phi$
$0 \le \phi \le 360$	$3.017 < x \le 4.997$	$y = 0.5 \sin \phi$
		$z = 0.5 \cos \phi$
$0 \le \phi \le 360$	$4.997 < x \le 6.0$	$y = (0.5 - ((x - 4.997) \sin 7)/\cos 7) \sin \phi$
		$z = (0.5 - ((x - 4.997) \sin 7)/\cos 7) \cos \phi$

Because the locations of the 51 pressure taps did not fully define the surface of the model, four extra axial locations were defined, namely: 0.0, 0.3, 0.6, and 6.0. Pressure values of zero were entered at these locations but were not plotted. These locations served to define the nose and rear boattail geometries.

With this three dimensional description of the model and the measured

pressure data, five files were generated for each run number (x,y,z,o,p). However, since the data were obtained on two separate rows (see Fig. 8), account had to be made for the 180 deg. offset between the pressure taps numbered 1-7 and the odd values in 9-51 on the one side and the even values in 8-50 on the other side. Each file was then organized into 55 columns by 145 rows, with column entries being at the same axial station and row entries at the same roll angle. Since the data were taken at 2.5 deg. increments from 0 to 360 deg. there was a total of 145 roll angles.

With the reduction complete, the set of 45 files representing the nine test cases with 7,975 values each were transferred to a VAX account. The VAX account was used to interface to an IRIS work station where the three dimensional surface contours were generated. A limitation of the available plotting program was that it could not show multiple views concurrently. To create the three view, three dimensional plots, a sequence was devised using the programs "plot3d" and "dump_edit" to combine single views into the plots shown in Figs. 21-23.

These surface pressure contour plots clearly show the three dimensional character of the swept flow around the test model at moderate incidence. The flow fields progress from near symmetric features at 2 deg. to flows with significant positive lift on the forebody and negative lift on the boattail. The extent and strengths of the ogive-cylinder and cylinder-boattail interactions clearly vary in a strongly three dimensional manner. The expanding swept flow around the sides of the model result in the highest suction pressures close to separation.

All the data and programs for transferring and formatting files to generate plots at any normal or oblique angle to the model are available on magnetic tape in a VAX readable format. Thus, these test data and their three dimensional projections will provide innumerable stringent test cases for global

aerodynamic surface pressure calculations.

Measurements have also been made of the static pressure fluctuations over the entire test range. The surface pressure fluctuations under the viscous layer are associated with the irregular motions of the flow field turbulence. For example, the intensity of the surface pressure fluctuations beneath a two dimensional turbulent boundary layer scales with the mean shear stress and is primarily composed of high frequency fluctuations. As the layer approaches separation, the level increases and character changes due primarily to the additional generation of low frequency energy. The high frequency components are generated in the small scale inner region, the so called law of the wall region, whereas the low frequency pressure fluctuations emanate from the larger scale unsteady motions in the outer region.

Examples of the circumferential pressure fluctuation levels measured at the mid-point of the boattail are shown in Fig. 24. At low angles of attack, the surface pressure fluctuations on the windward side are broad-band, indicative of an attached, unsteady flow. Although there is some general increase in the fluctuating intensity beneath the lee side flow field, the circumferential distribution is consistent with an unsteady, attached flow. At high angles of attack, the pressure fluctuations on the windward surface are greatly reduced and are primarily composed of high frequency, small scale fluctuations indicative of a thin and stable attached swept shear layer. However, there is now a dramatic increase and variations in fluctuation level in the lee side flow field. The intensity reaches a maximum in the separation region and the spectrum is dominated by low frequency components caused by large scale unsteady motions due to time dependent fluctuations in the location of the shear layer primary separation point. The levels are significantly lower under the separated shear layer, but rise to a second peak in the reattachment region where once again large scale flow unsteadiness is present.

Flow Field Measurements

Before any flow field measurements were made, the positions of the lee side vortices adjacent to the model surface were established for both symmetric and asymmetric wake flows. However, it must be borne in mind that vapor screen photographs image the condensation or evaporation of a gas or liquid mixture in the flow field, where there are large changes in static pressure and temperature. The interpretation of vapor screen photographs is also complicated by the fact that the mixture may not achieve thermodynamic equilibrium during its transit time along the model. Thus, the dark wake regions may not precisely represent the body vortices. The boundary between the dark and light regions is not a cross flow dividing streamline, it is the locus of points where local conditions produce a saturated vapor. But, despite these complications, vapor screen photographs can be used to determine gross, qualitative flow field information. Examples of vapor-screen flow visualization of the vortices on the boattail (x/d = 6.0) are shown in Figs. 25 and 26. These pictures clearly show the leeward vortices and their feeding sheets, which are visible as dark regions within the light sheet. The effect of model spin rate on wake asymmetry is clearly evident, and substantial changes in vortex location can be identified.

Laser velocimeter data presented in Fig. 27 show the results of two scans across the wake at the cylinder-boattail junction with and without spin. These measurements give a quantitative flow field picture of spin effects. In the stationary case, symmetric lee side vortex flow is evident from the characteristics of the three mean profiles. The axial velocity variation across the wake shows slight velocity defects associated with each vortex. These defects are more pronounced and reach a maximum at the vortex cores. They also increase with vortex strength up to a maximum of 30 percent of the freestream value. The characteristic down wash of the body vortices can be

seen between the vortices (z=0) and the up wash generated by the vortices is noted outboard of each vortex. The magnitude of the down wash increases closer to the body. It also increases with angle of attack as the vortices increase in strength. Close to the body, at α=10 deg, down wash velocities of up to 25 percent of the freestream velocity were observed. The cross flow velocity component is again symmetric and indicates free-vortex forms in both the outer inviscid flow fields with a central viscous region. Clearly, spin induced asymmetries distort the leeward vortex field and alter the relative vortex strengths as evidenced by the changes in the locations and relative strengths of the axial core velocity defects. Movement and distortions of the down wash and cross flow velocity profiles are also apparent.

Scans across the wake taken close to the model surface show marked differences. Examination of the two cross flow profiles in Fig. 28 give an accurate measure of the extent of vortex asymmetry in both position and strength. In the spinning case, the gradient across the viscous core of the port vortex is almost a factor of three greater than that across the starboard vortex. Model spin also distorts the turbulence characteristics of the lee side flow field. As expected, all three turbulence normal stresses peak in regions of maximum mean gradient. However, as seen in Fig. 29, spin stabilizes the vortex on the retreating, moving wall side but adversely affects the starboard vortex stability.

Measurements have also been made in the viscous regions close to separation. Some of these results are shown in Figs. 30-32. For zero spin (Fig. 30), flow field symmetry is evident at the two circumferential stations, ϕ = 120° and 240°. With spin (Figs. 31 and 32), significant asymmetry can be seen in the velocity profiles. At ϕ = 120°, the cross flow velocity is in the same direction as the wall velocity. At ϕ = 240°, the outer cross flow opposes the

wall velocity. Fig. 31 shows the axial and cross flow velocity profiles measured at the cylinder-boattail junction. Here, the favorable wall velocity delays separation at $\phi = 120°$ and there is a thin boundary layer with a slight overshoot in the axial velocity profile. At $\phi = 240°$, the wall velocity acts to retard the flow and thicken the wall boundary layer. The effects of surface spin are seen to persist further out into the flow field. Fig. 32 shows the corresponding velocity profiles measured midway along the boattail (x/d = 5.5). Although the decreased body diameter results in reduced surface velocity, the boundary layer is thicker and the effects of spin are seen much further from the wall. At $\phi = 240°$, the adverse effect of wall velocity has separated the flow, as evidenced by the character of the axial velocity profile, which is typical of that produced by a streamwise vortical shear layer.

Examples of the "on line" laser velocimeter data outputs (Figs. 33 and 34) show the results of two scans across the wake at the same body station on the boattail with and without spin. These measurements of mean velocity, turbulence intensity and shear stress give a quantitative picture of spin effects. Clearly, the effect is to distort the leeward vortex field and to alter the relative vortex strengths and their turbulent characteristics. From multiple scans, obtained as the model was coned, details of the mean and turbulent structure of the attached and separated viscous layers can be constructed. Details of the wake structure can then be derived and the quantitative influence of spin induced vortex asymmetry assessed. A complete listing of the laser velocimeter flow field measurements is given in Appendix 2.

Concluding Remarks

The prediction of the destabilizing forces and moments in the transonic flight regime is a key element in projectile aerodynamics. But, although there has been a concerted computational effort in this area, to date there have been few detailed experimental measurements made for comparison. This report presents the results of an extensive test program in which the normal and Magnus force and moment coefficients, surface pressure distributions and the first quantitative flow field measurements have been made for a projectile-type configuration at transonic speeds.

The results show the amplitude, character and extent of linear and non-linear lift and pitching moment. The measurements of the Magnus force and moment coefficients show that the transonic regime is the critical Mach number range for this model configuration. It is the regime through which the projectile will encounter the maximum destabilizing aerodynamic effects. Extensive surface pressure distribution measurements have shown the relative contributions of the primary elements of the projectile, namely: the ogive, cylinder and boattail, to the total lift. The results clearly show the destabilizing influence of the boattail and the three dimensional swept nature of the flow field at higher angles of attack. Measurements of the unsteady character of the surface pressure fluctuations reveal that there is significant large-scale unsteady flow associated with the three dimensional swept separation zones even at moderate incidence.

Finally, the capabilities of a new three dimensional, forward scatter, laser velocimeter of the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel have been demonstrated and measurements have been obtained at several body stations and angles of attack. Although the simultaneous measurement of three velocity components turned out to be a tedious and lengthy proposition,

these data represent the first quantitative flow field documentation of the symmetric and asymmetric lee side vortex flows in the transonic test regime. These results will serve for comparison with computations and guide future code developments.

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Acknowledgement

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List of Symbols

Symbol	Data Symbol	Description
α	A, ALPHA	angle of attack of model reference axis, degrees
b		model span
$\bar{c}$		mean aerodynamic chord
C_m	CLM	pitching moment coefficient, pitching moment/$q_\infty S\bar{c}$
	CMP	Magnus force coefficient, yawing moment/q_∞S D VR
C_N	CN	normal force coefficient, normal force/q_∞S
	CNP	Magnus force coefficient, side moment/q_∞S VR
θ	CONE	cone angle, degrees
	CONF	configuration code number, blunt=1, sharp=2
C_Y	CY	side force coefficient, side force/q_∞S
C_n	CYN	yawing moment coefficient, yawing moment/q_∞Sb
D,d		body diameter, 0.35417 ft.
M_∞	MACH	freestream Mach number
p		model spin rate
p_∞	P	freestream static pressure, psf
$p_{t\infty}$	PT	freestream total pressure, psf
q_∞	Q	freestream dynamic pressure, psf
R	RN/L	Reynolds number, millions per foot
Ω	RPM	spin rate of ogive-cylinder about its axis, positive sense is clockwise rotation looking in the upstream direction, rpm
S		reference area, 0.098516 ft.^{2}
T_∞	TF	freestream static temperature, psf
$T_{t\infty}$	TTF	freestream total temperature, psf
u,v,w		velocity components along the x,y,z axes
u',v',w'	$\overline{U'}$,$\overline{V'}$,$\overline{W'}$	RMS quantities
$\overline{u'v'}$	$\overline{U'V'}$	
$\overline{v'w'}$	$\overline{V'W'}$	
$\overline{w'u'}$	$\overline{W'U'}$	turbulent shear stress
U		freestream velocity
	VR	velocity ratio, two times model surface tangential velocity to tunnel freestream velocity, 2πD RPM/60 U

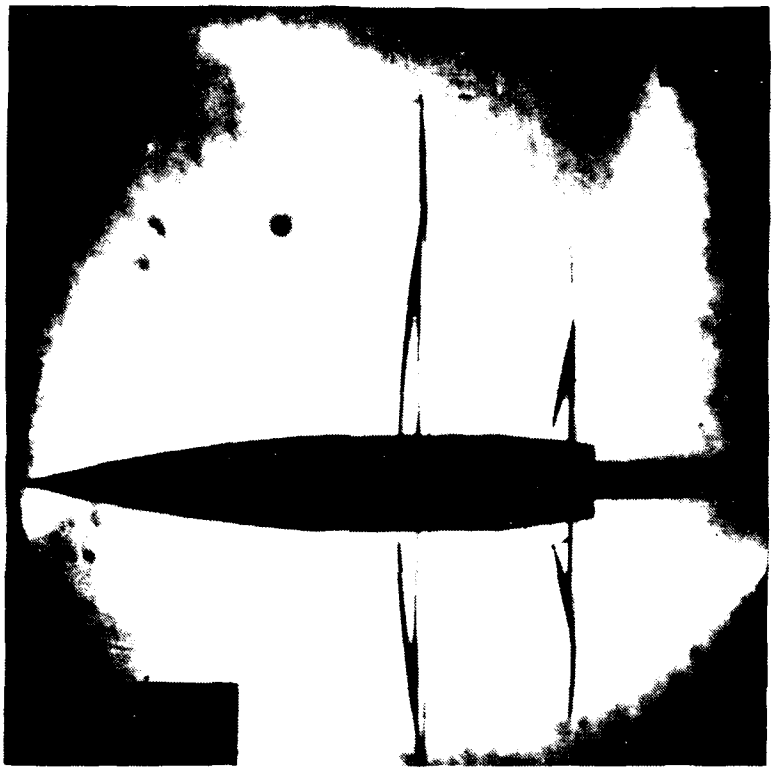
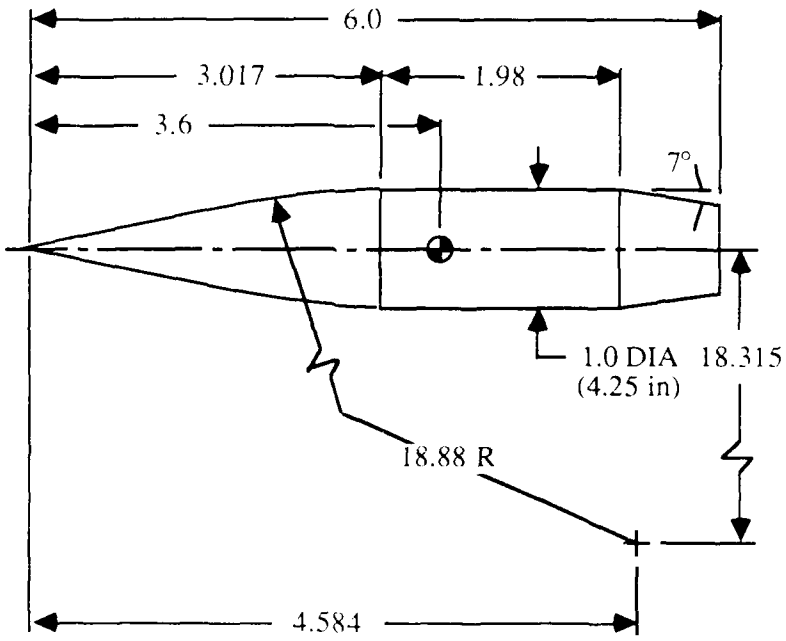


Fig. 1 Projectile Flow Field, $\alpha = 0$, $M = 0.96$ (from Ref. 1)



All Dimensions in Calibers

Fig. 2a Secant-Ogive, Cylinder, Boattail Geometry

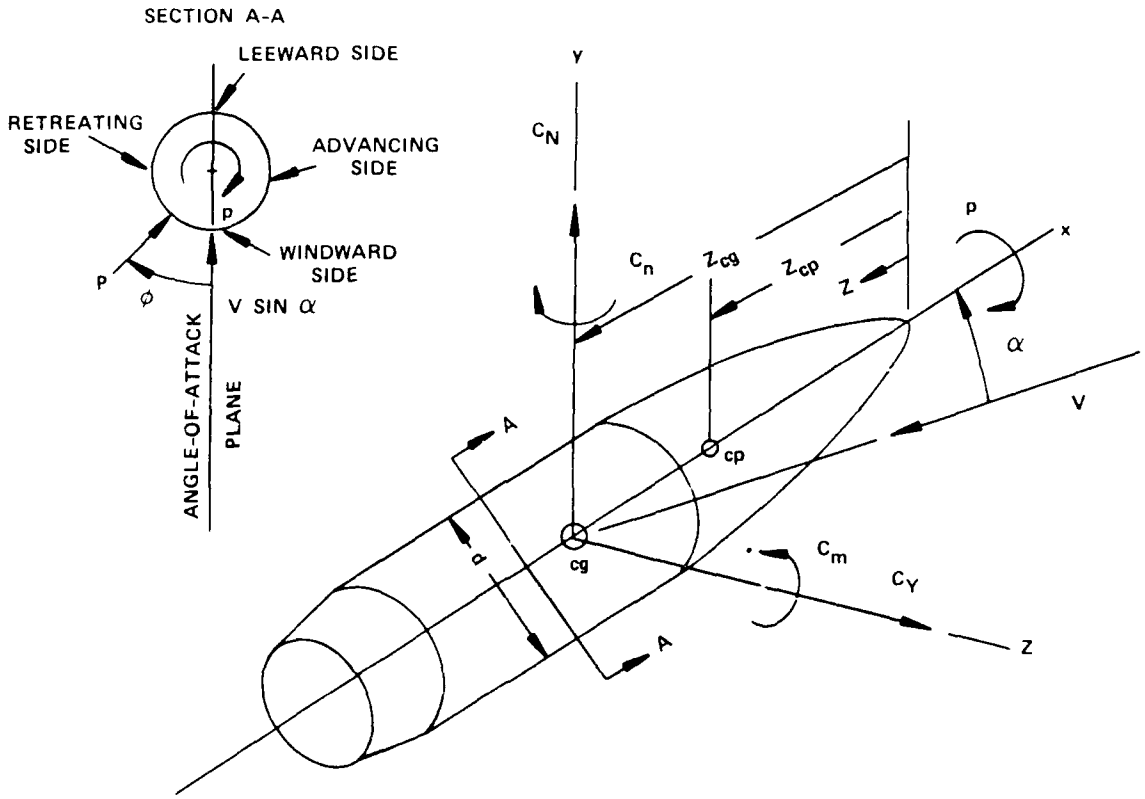


Fig. 2b Model Coordinate System

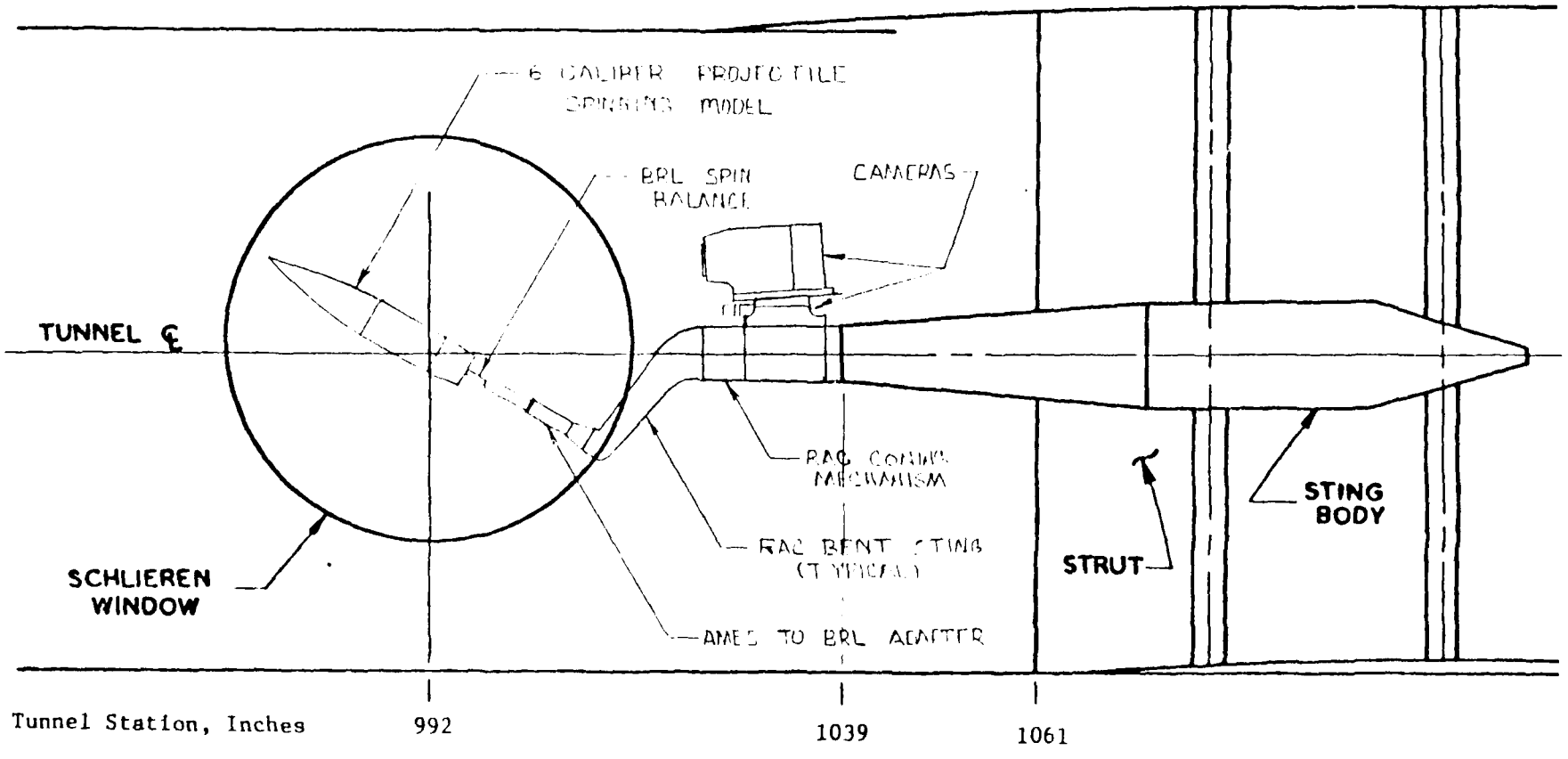


Fig. 3 Details of Spinning Model Installation in the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel

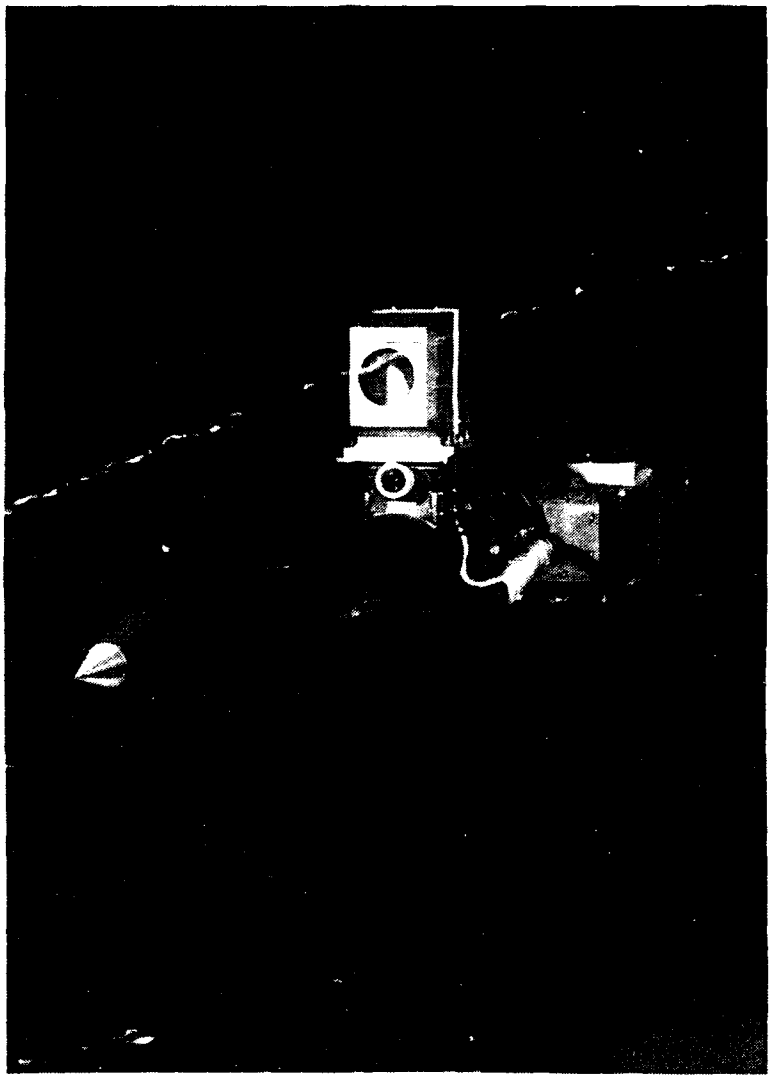


Fig. 4 Model Installation in the NASA Ames 6- by 6-Ft. Supersonic Wind Tunnel

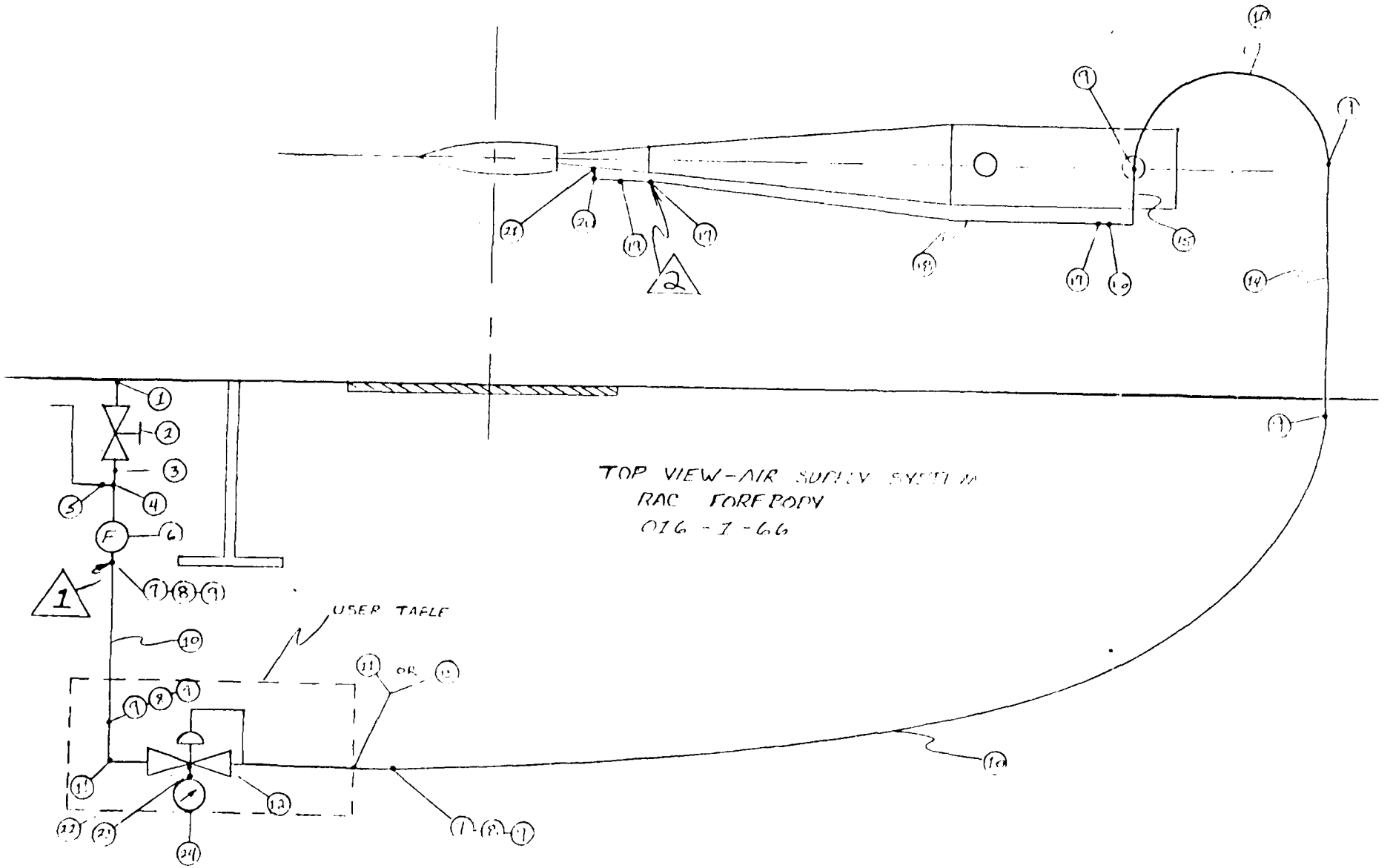


Fig. 5 Turbine Air Supply System

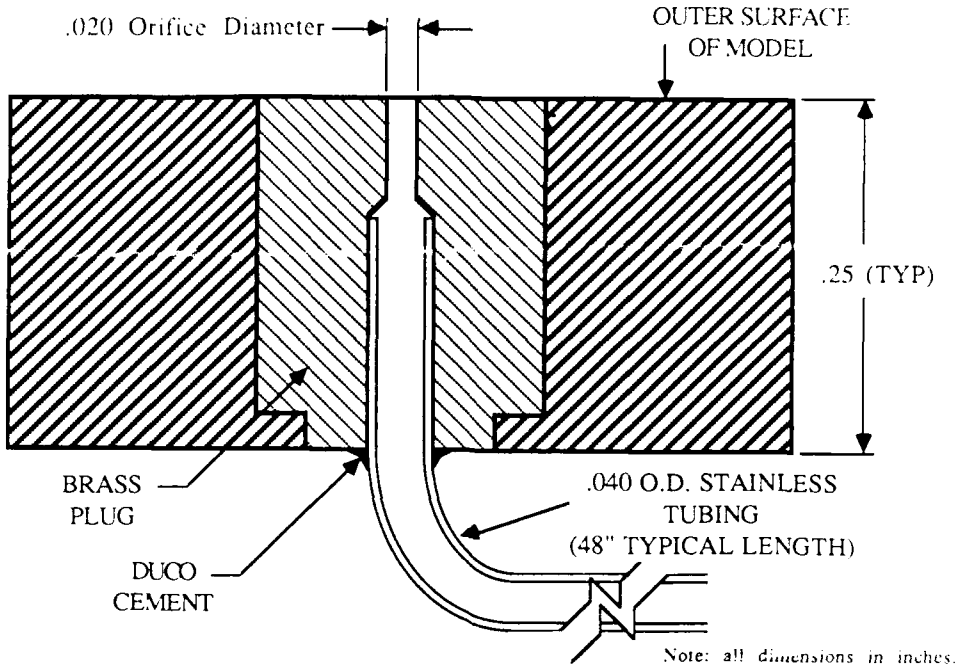


Fig. 6 Static Pressure Hole Geometry

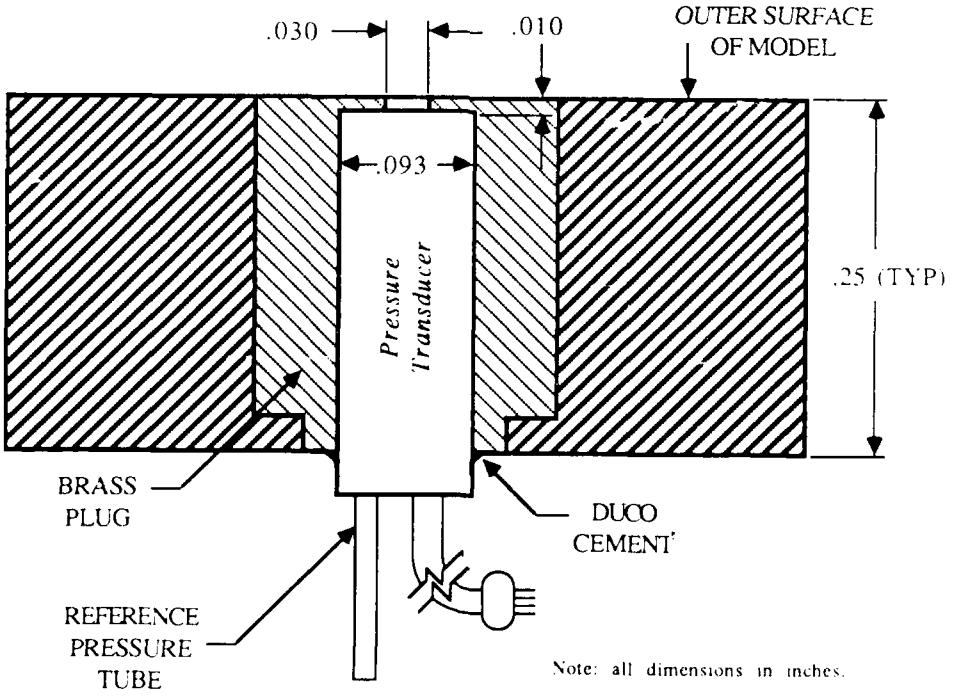


Fig. 7 Pressure Transducer Installation

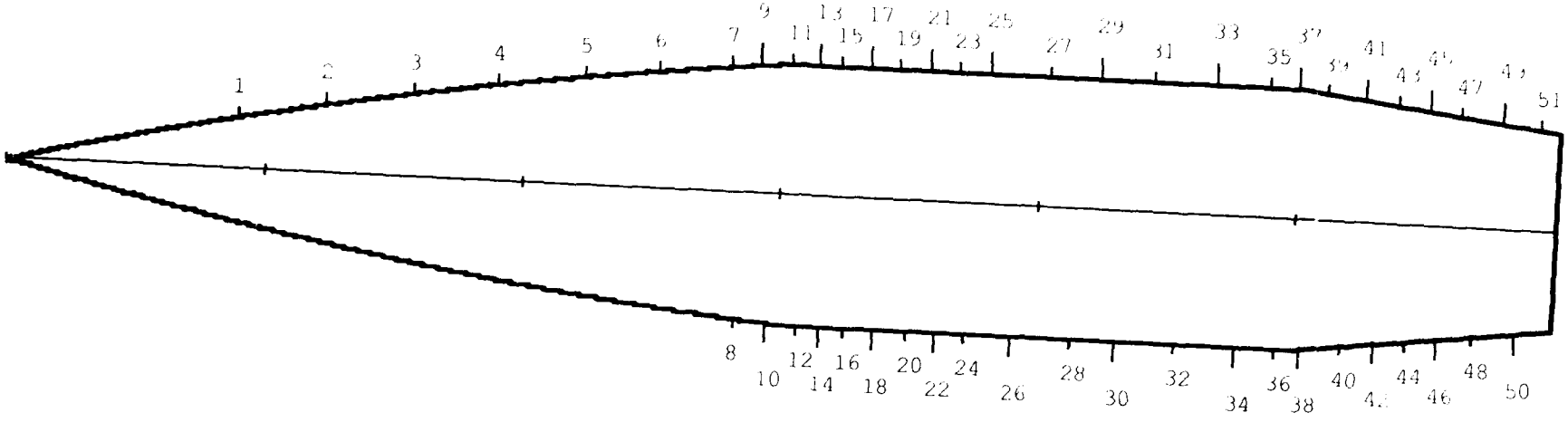


Fig. 8 Static Pressure Measurement Locations

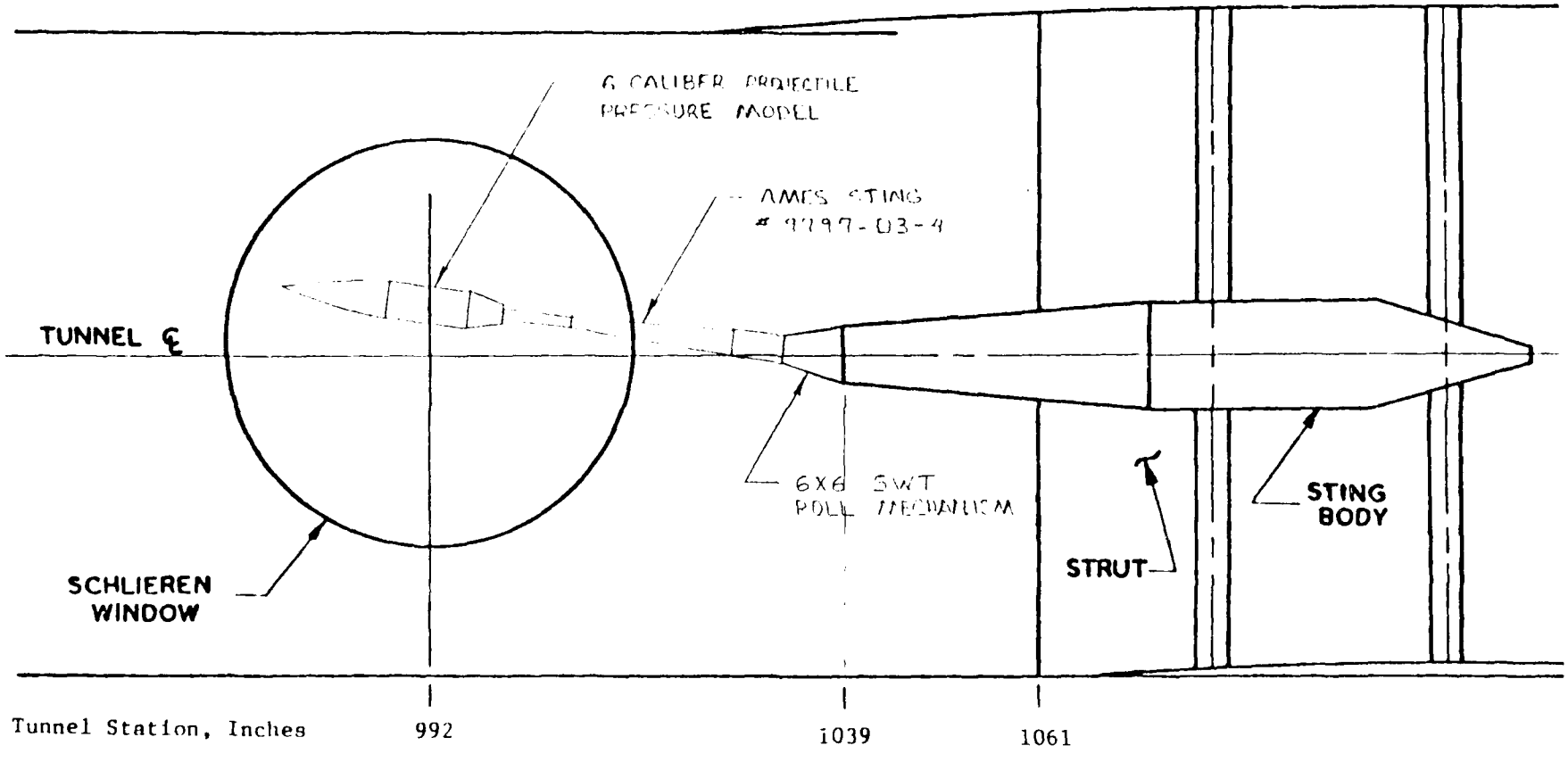


Fig. 9 Details of Pressure Model Installation

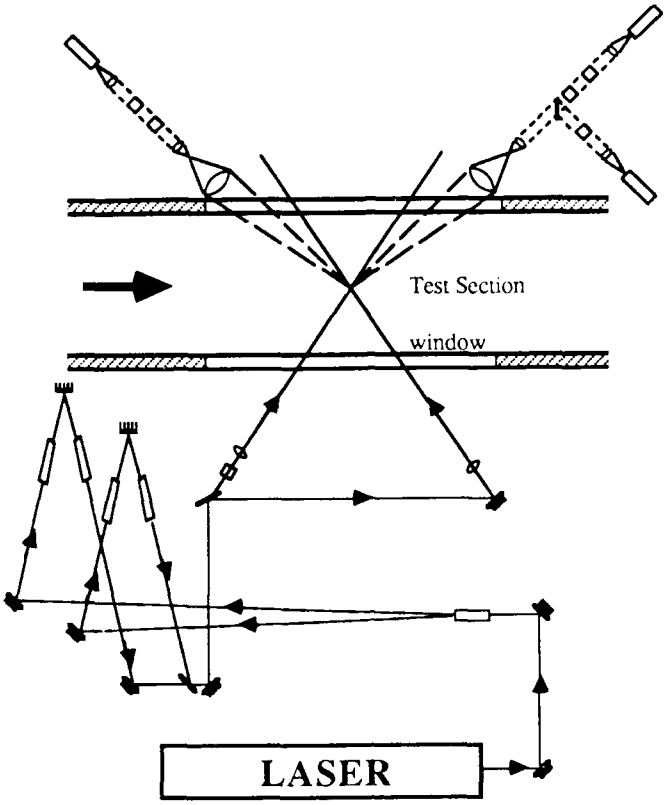


Fig. 10 Schematic of the LDV Optical System

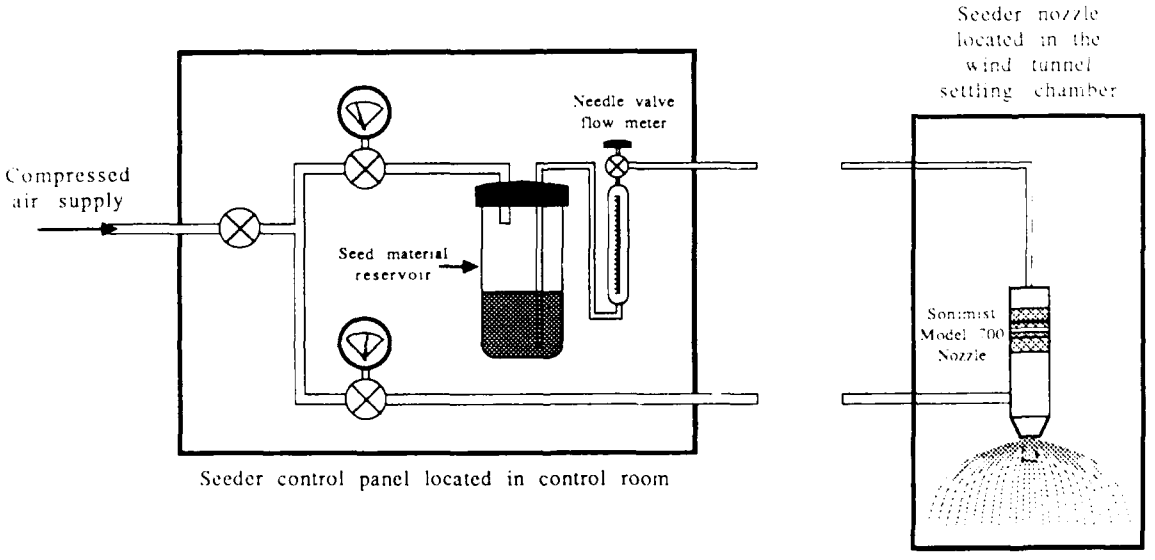


Fig. 11 Wind Tunnel Seeding System

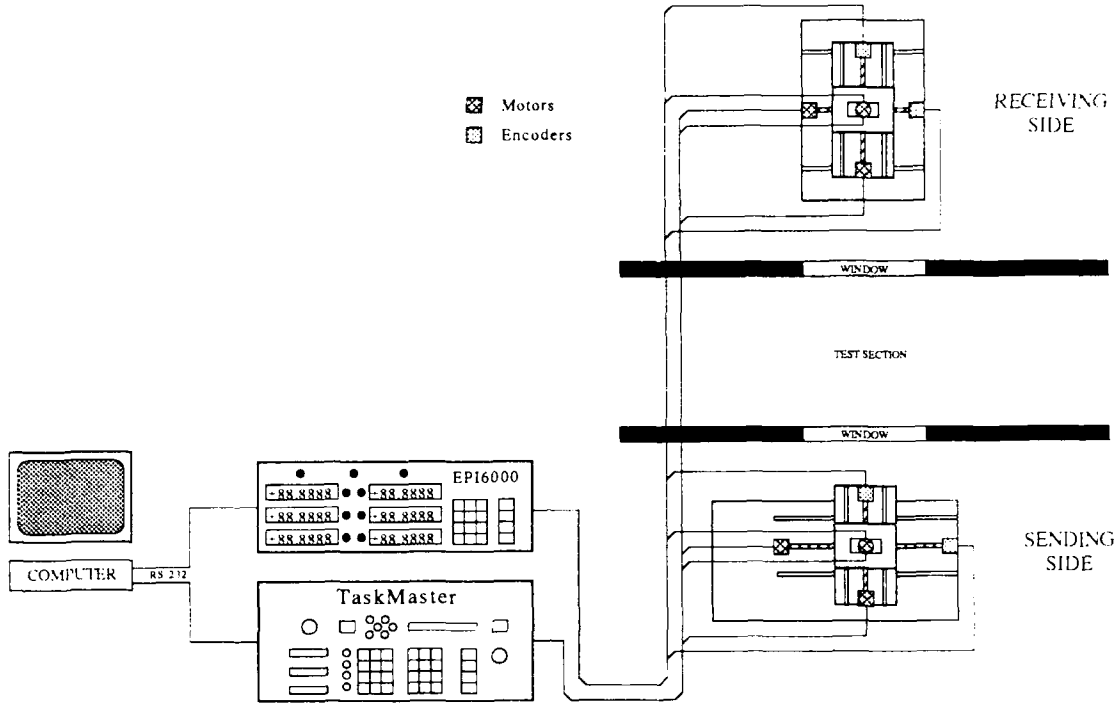


Fig. 12 Six Axis Traverse System with Position Verification

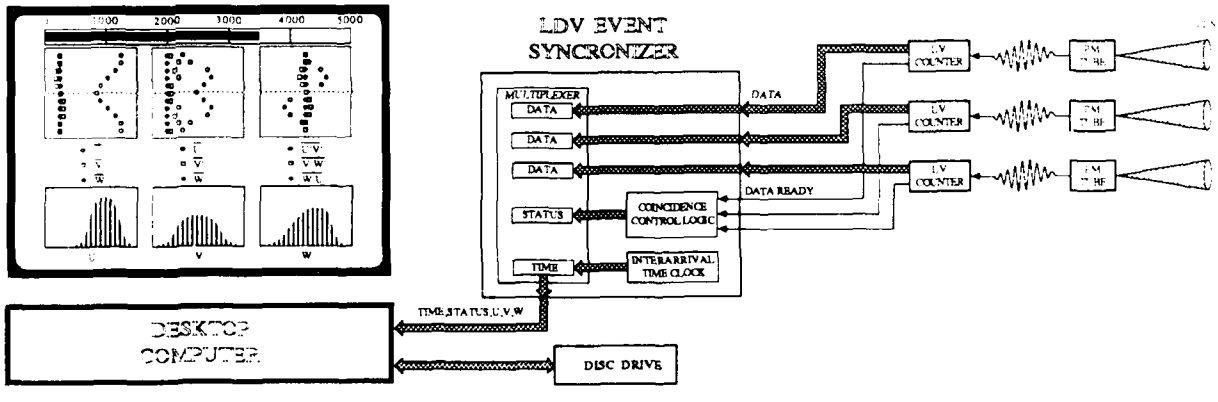
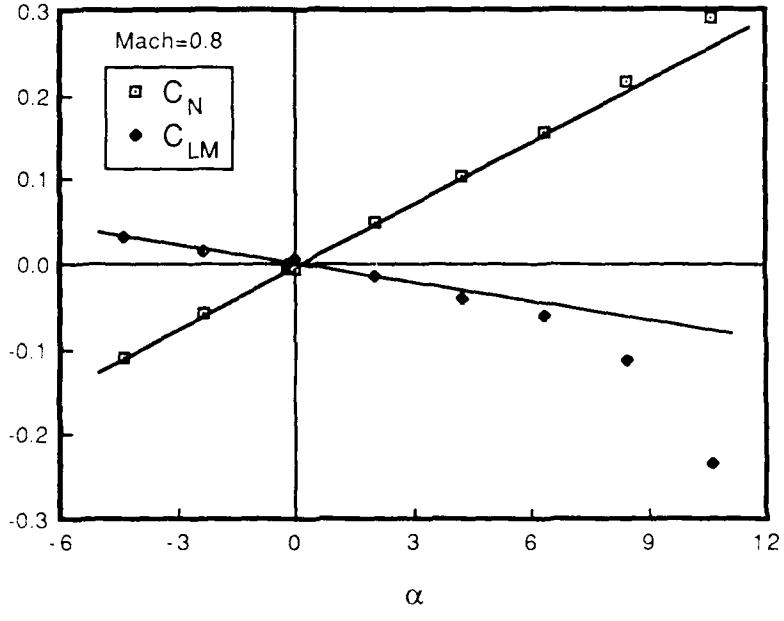


Fig. 13 Three Component Data Acquisition System



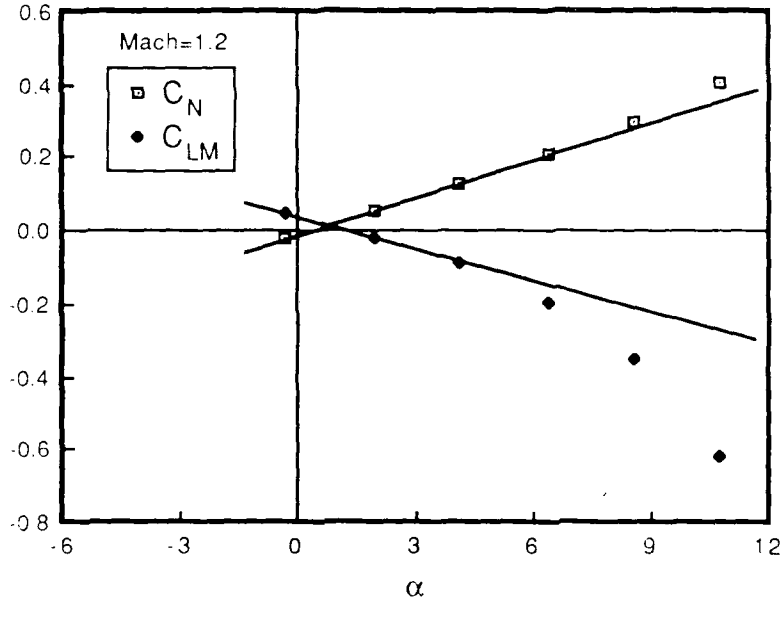


Fig. 14 Normal Force and Pitching Moment Measurements

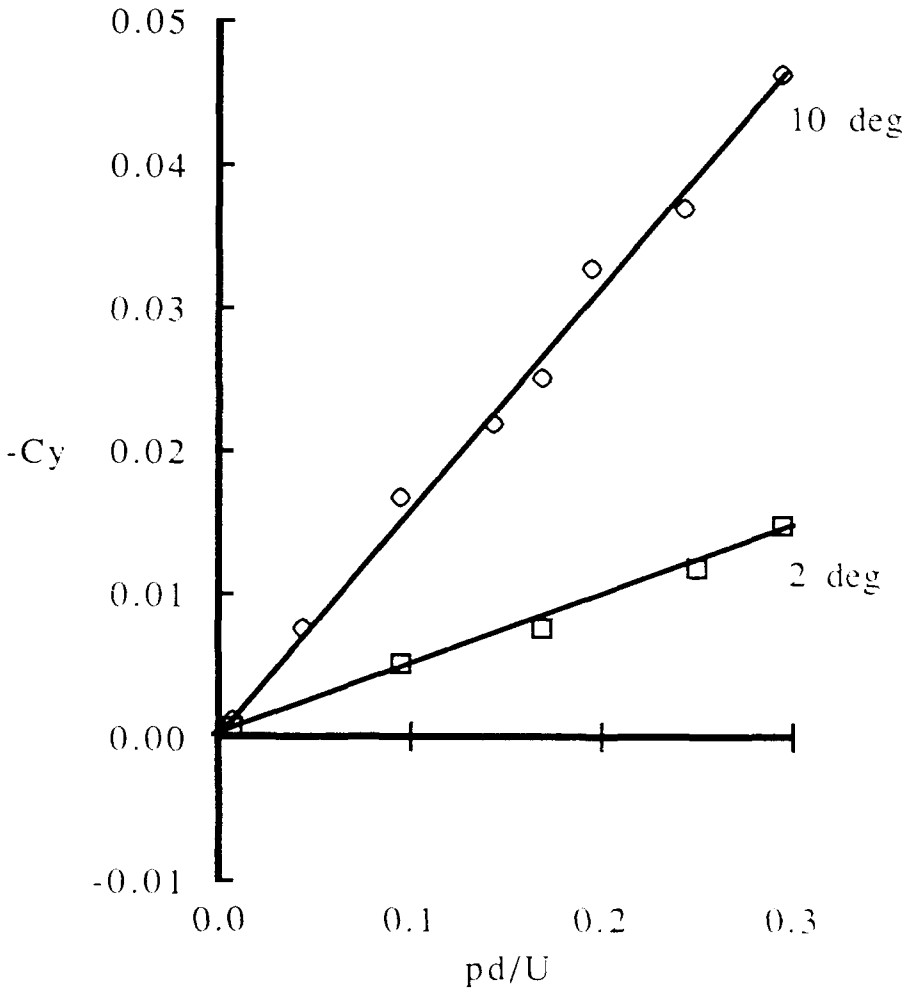


Fig. 15 Magnus Force Coefficient, M = 0.8

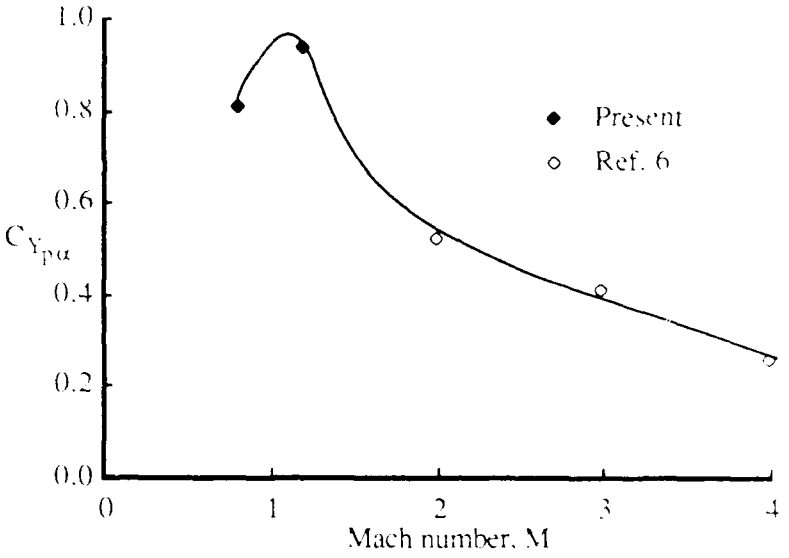


Fig. 16 Slope of the Magnus Force Coefficient

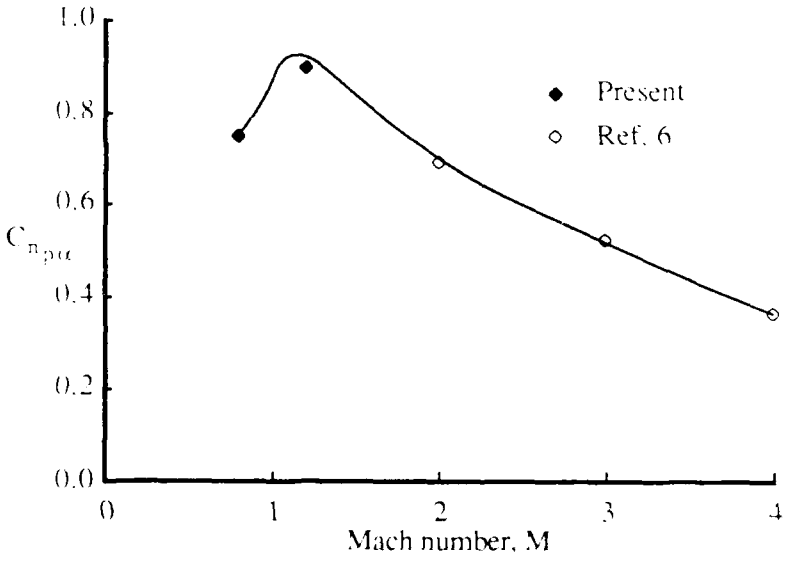


Fig. 17 Slope of the Magnus Moment Coefficient

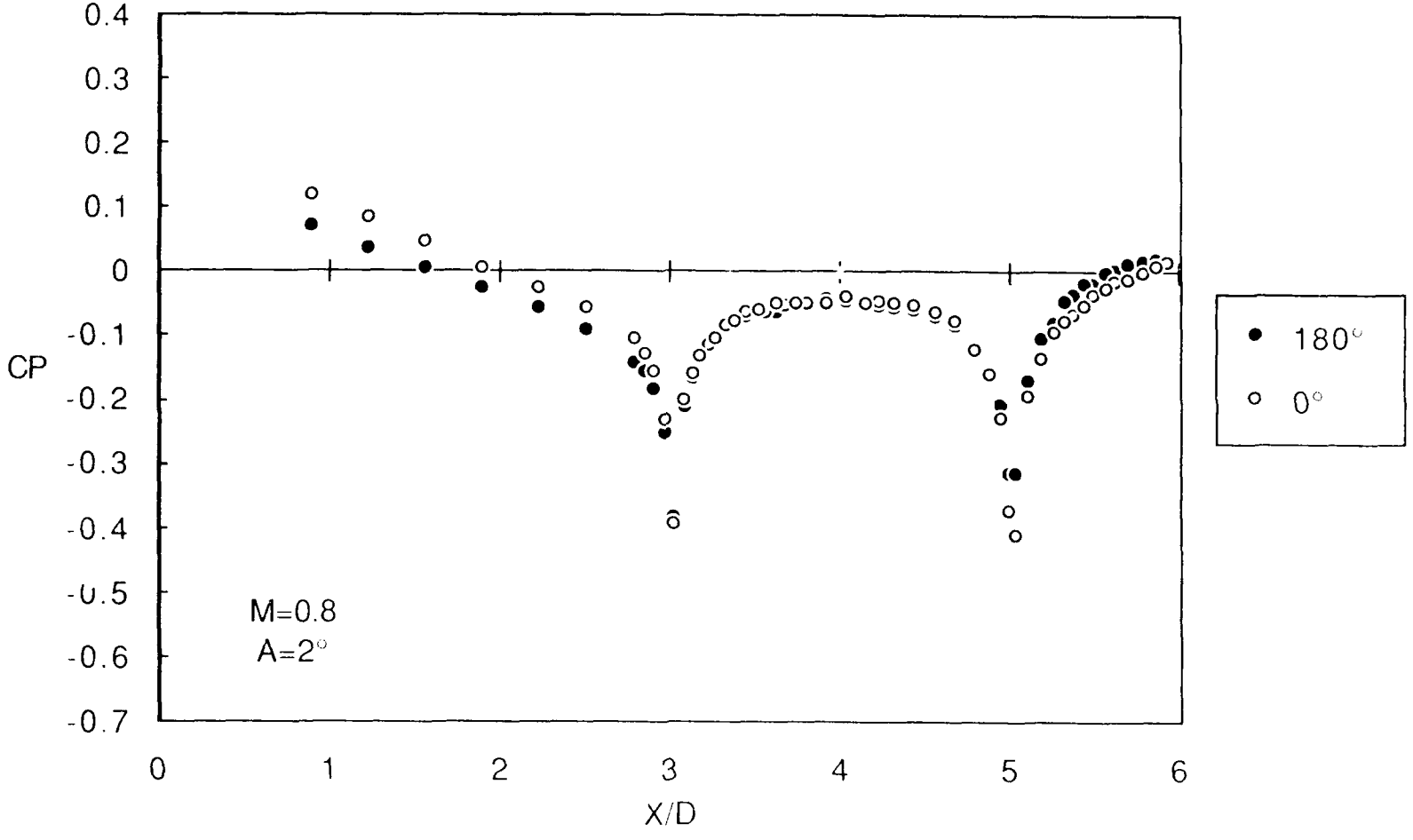
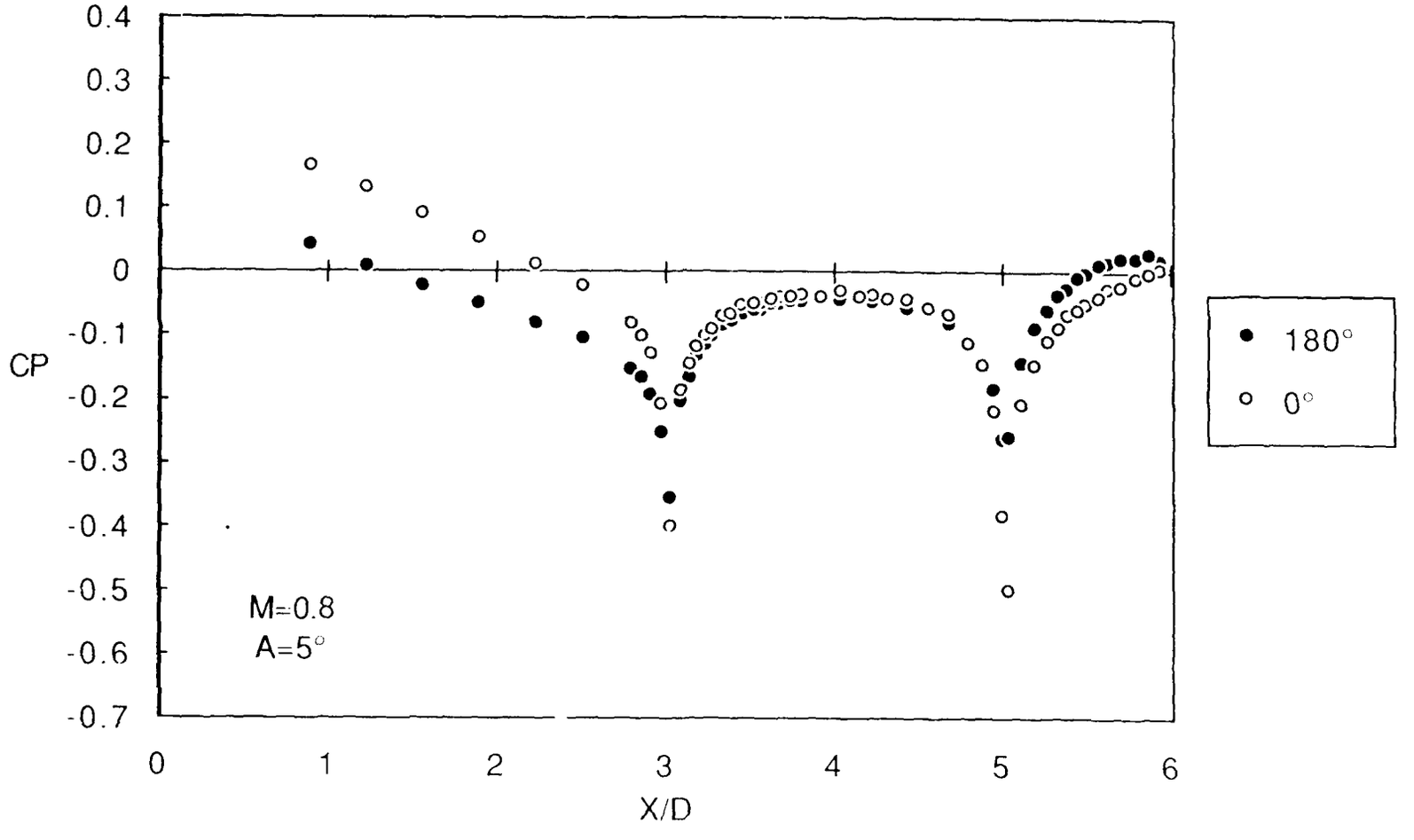


Fig. 18 Axial Surface Pressure Distributions



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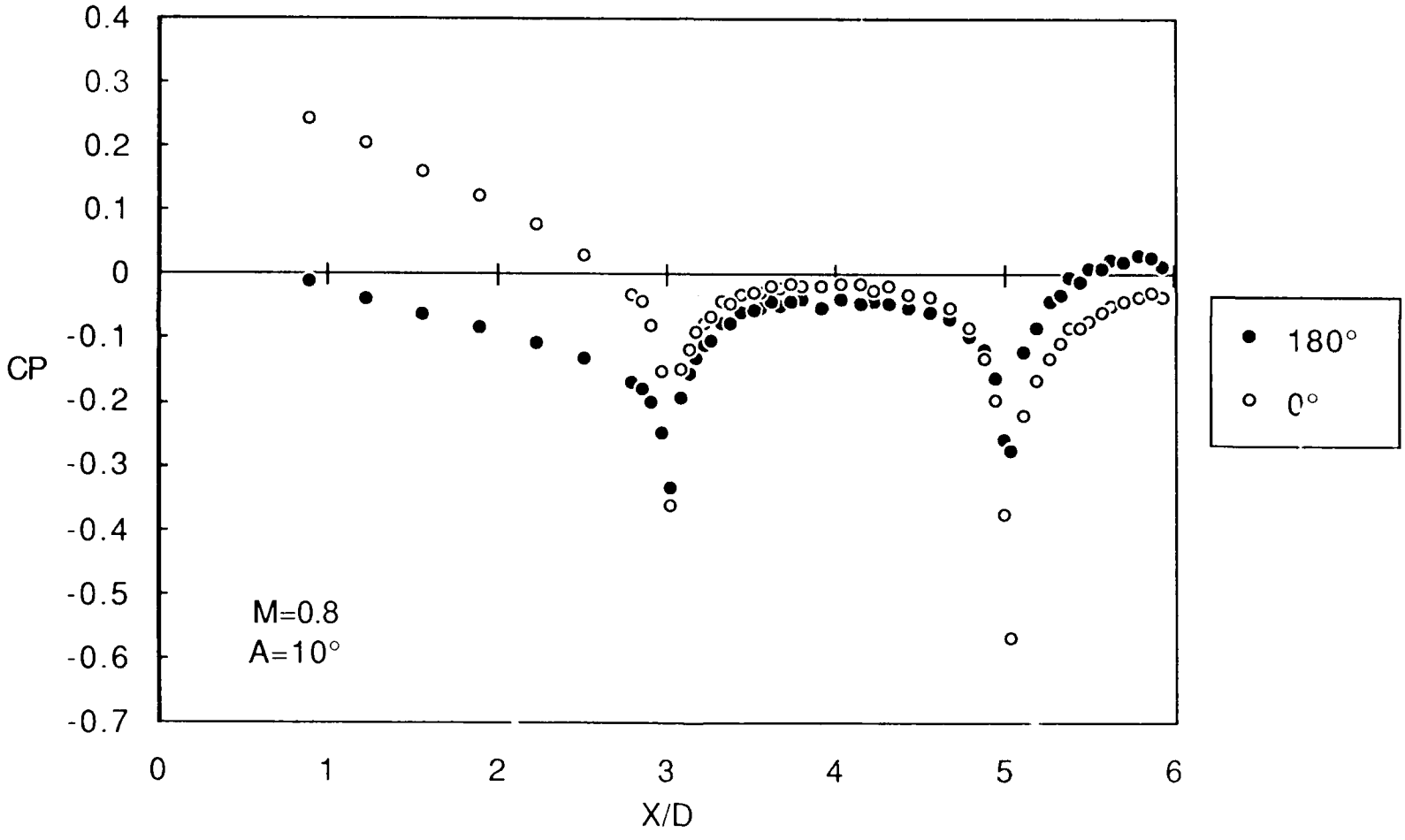

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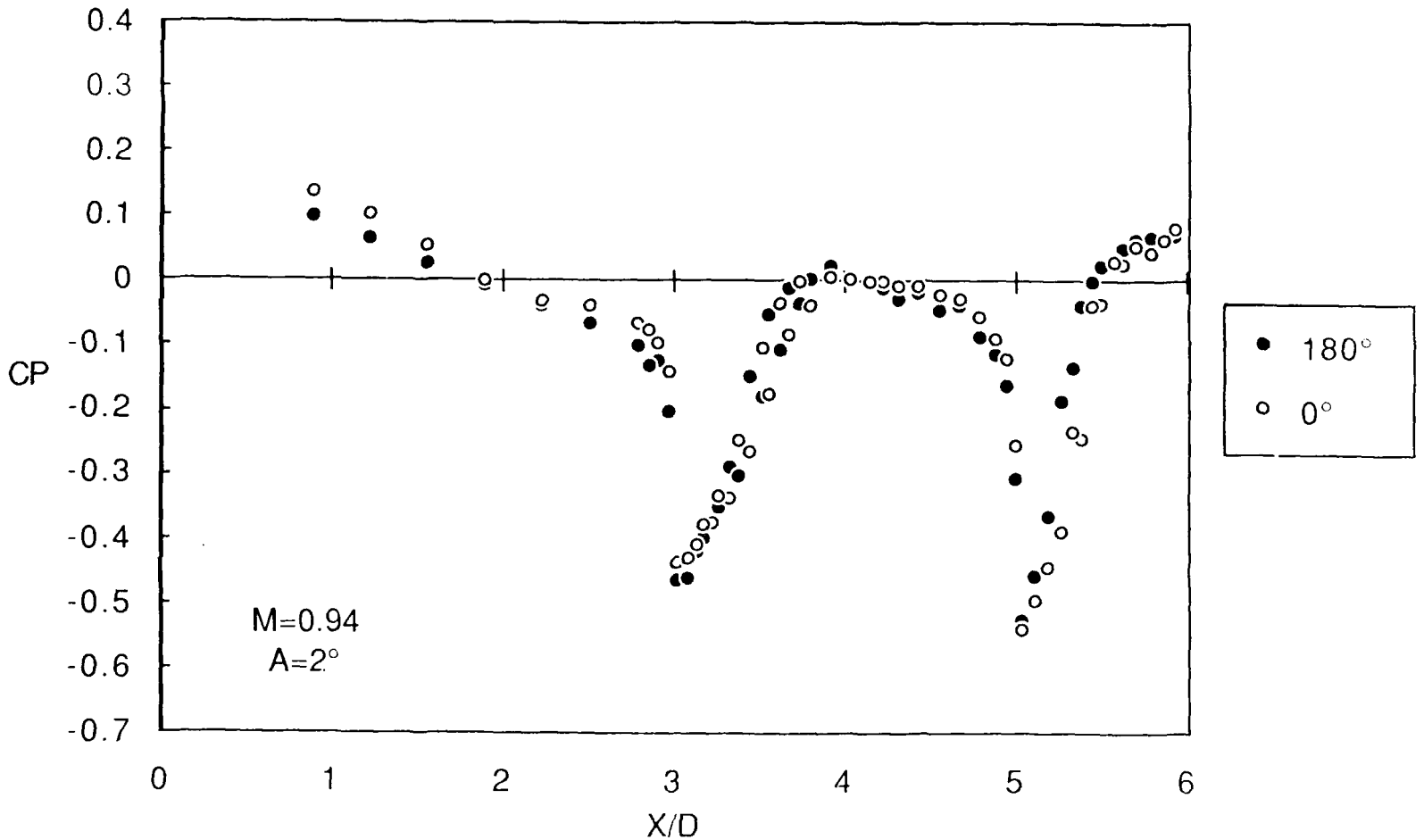
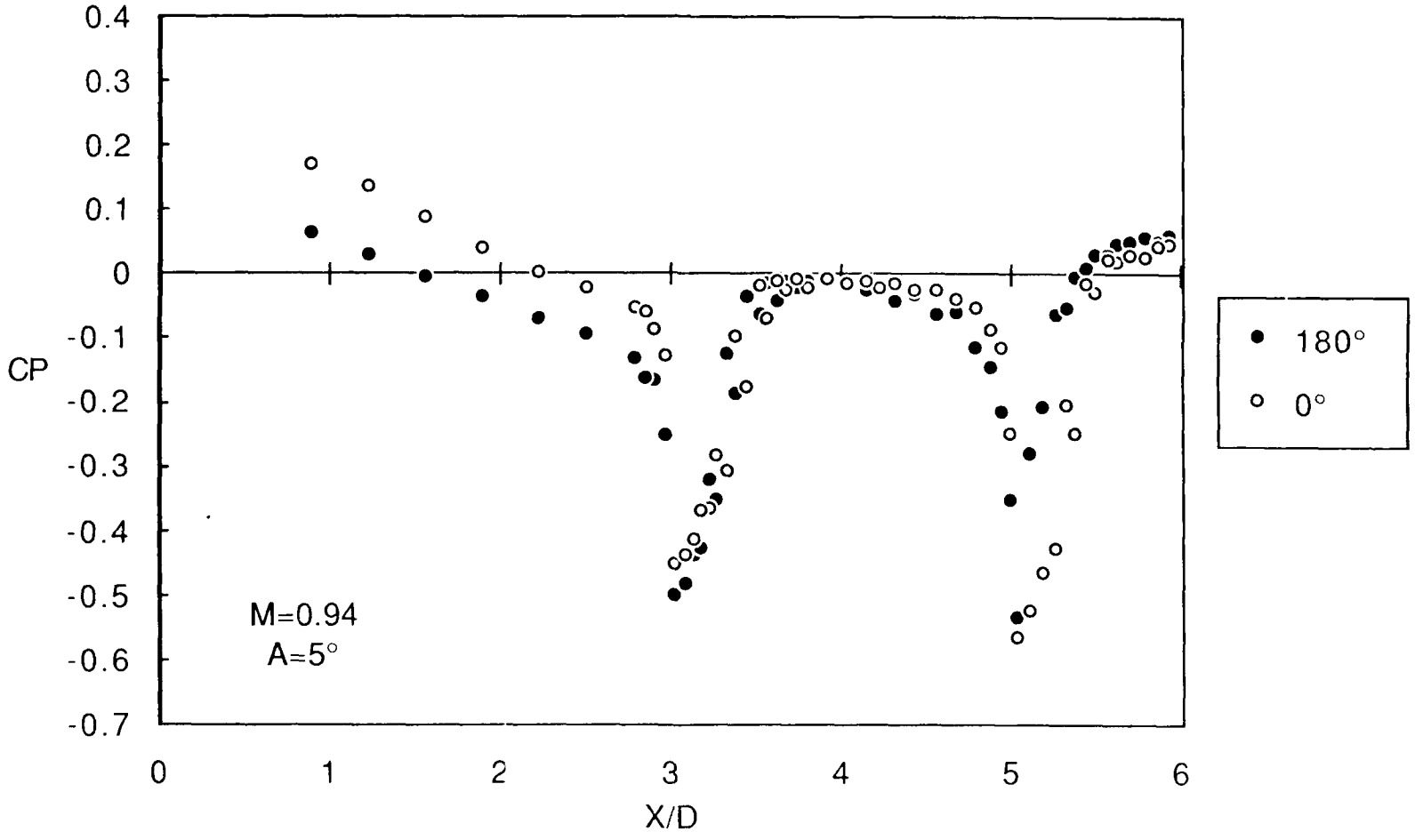


Fig. 19 Axial Surface Pressure Distributions



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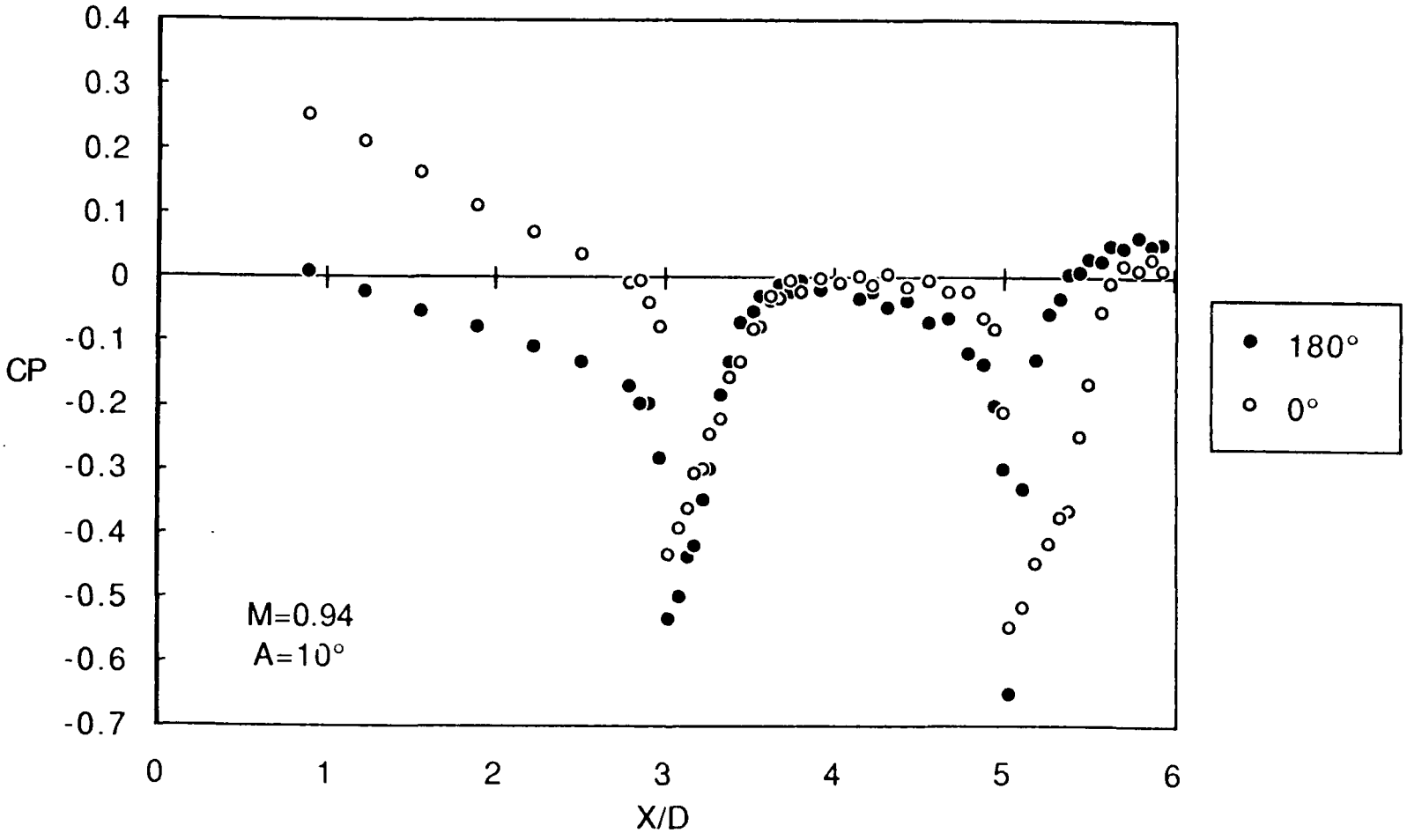

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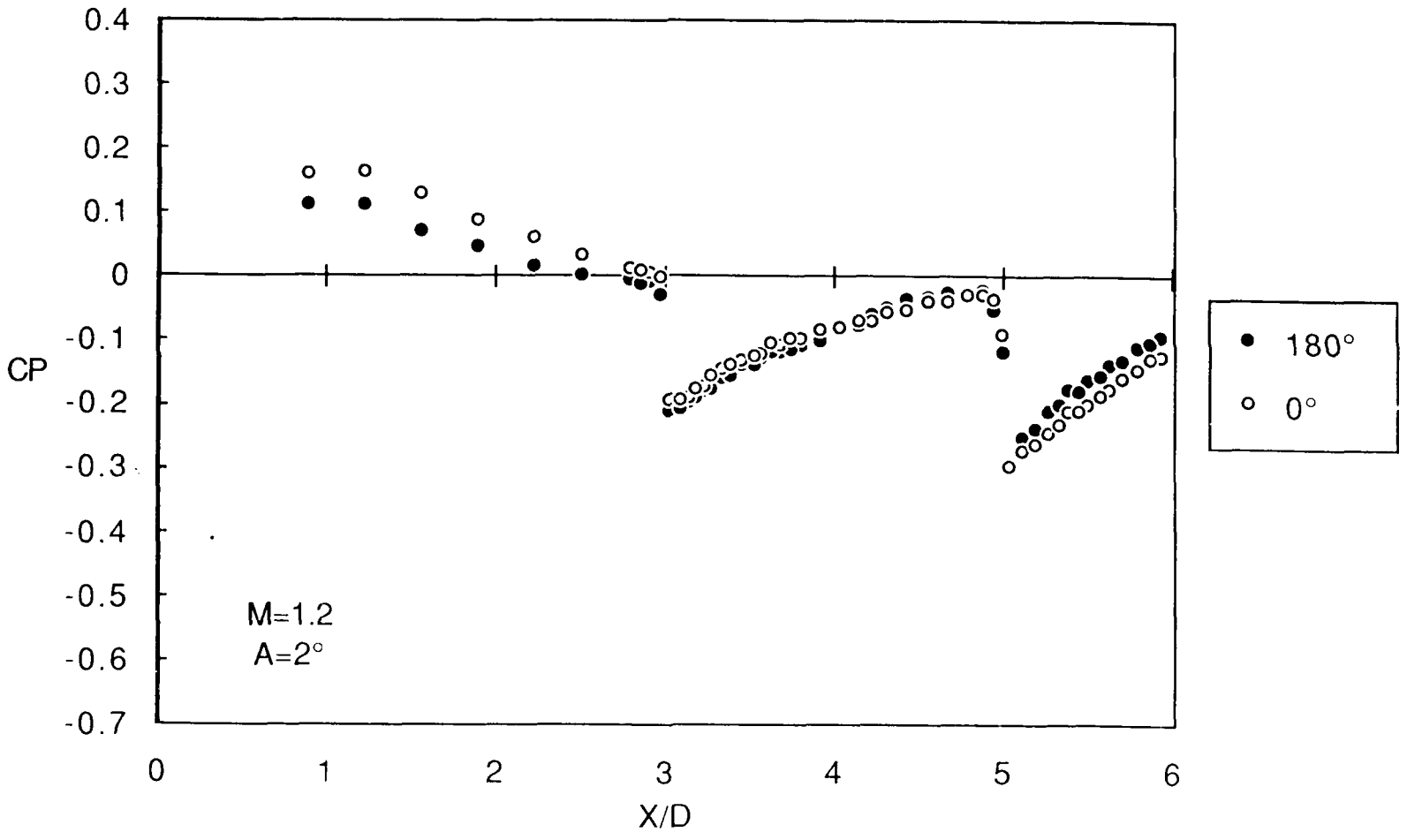


Fig. 20 Axial Surface Pressure Distributions

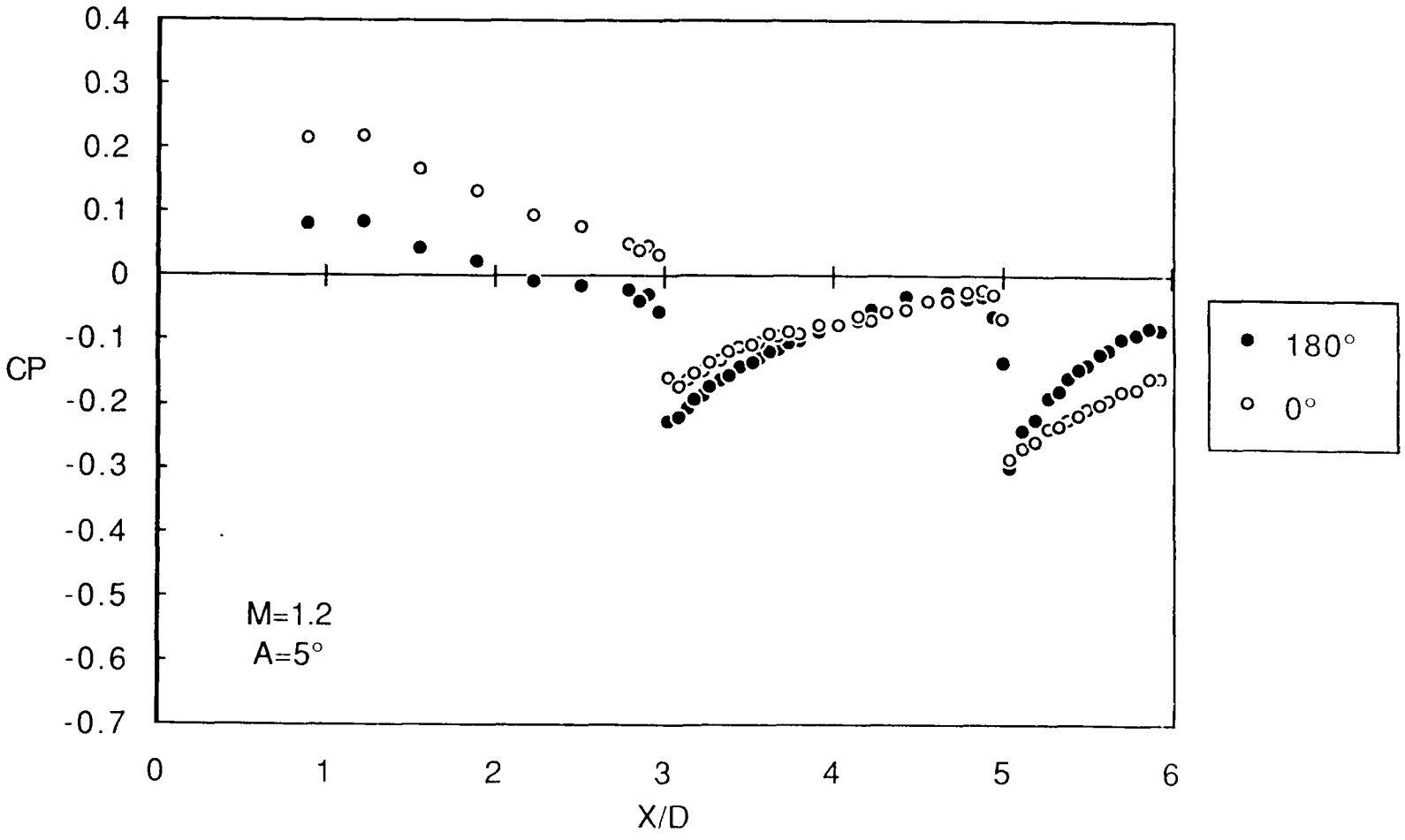
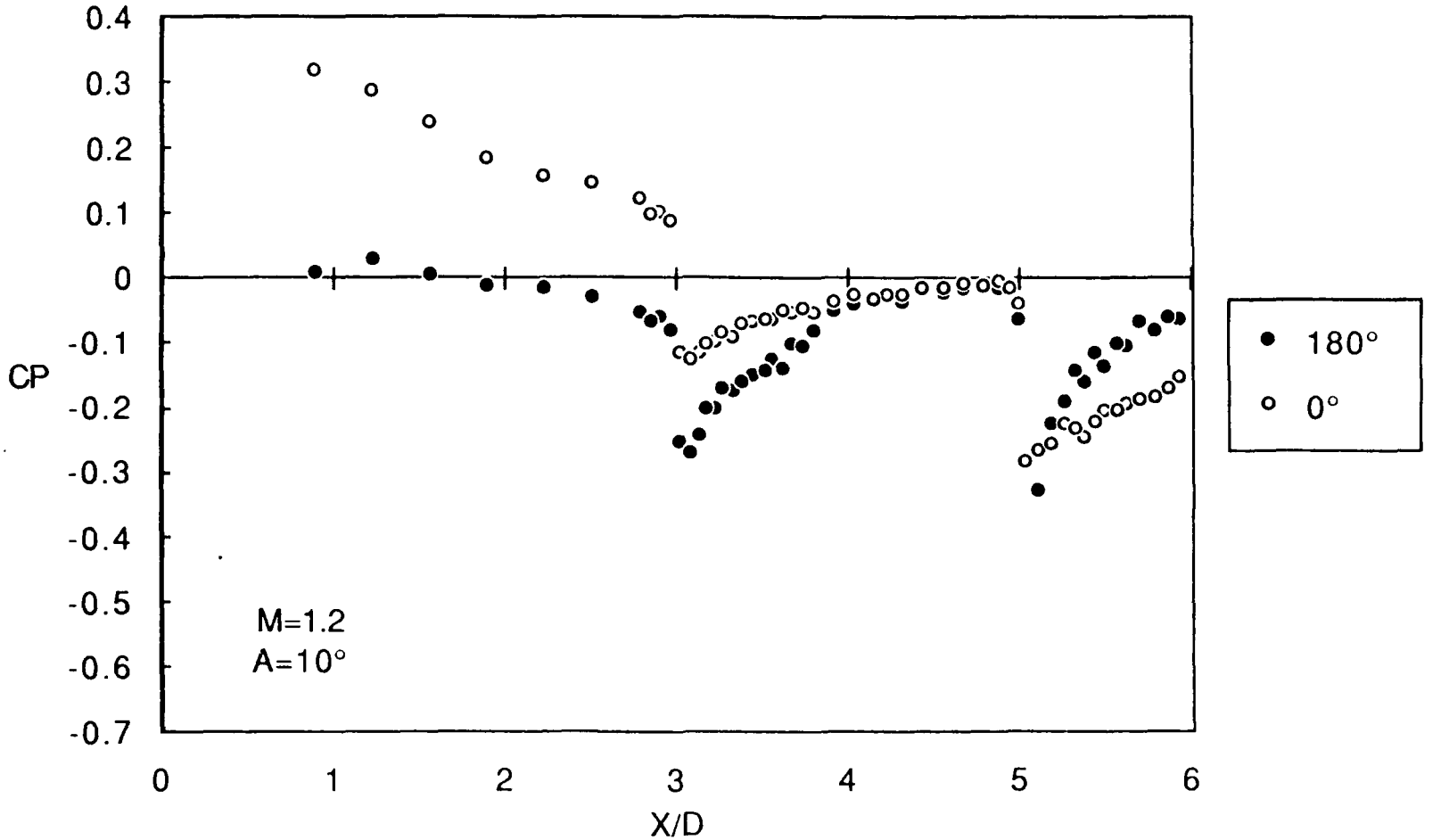


Fig. 20 Continued



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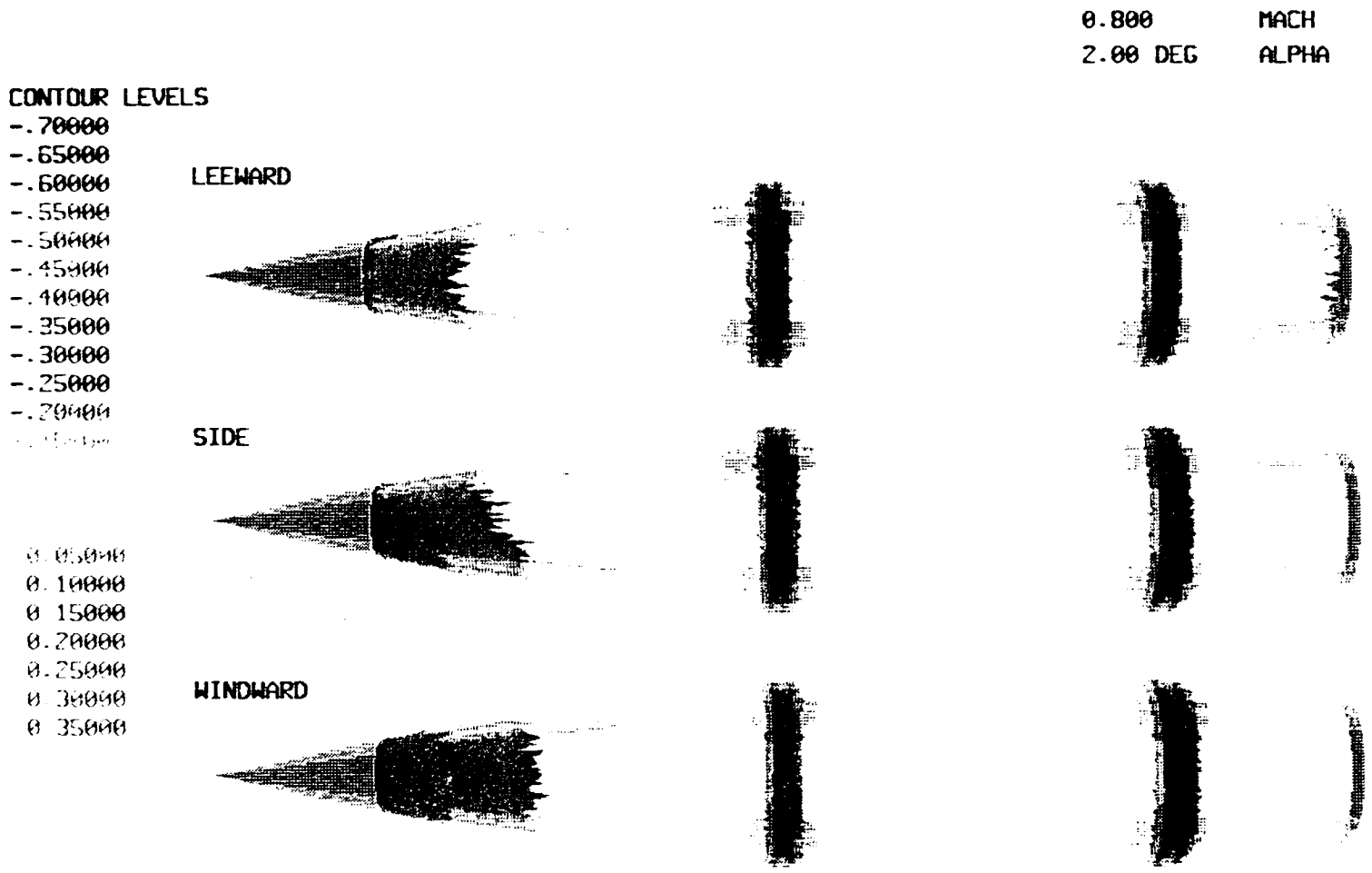
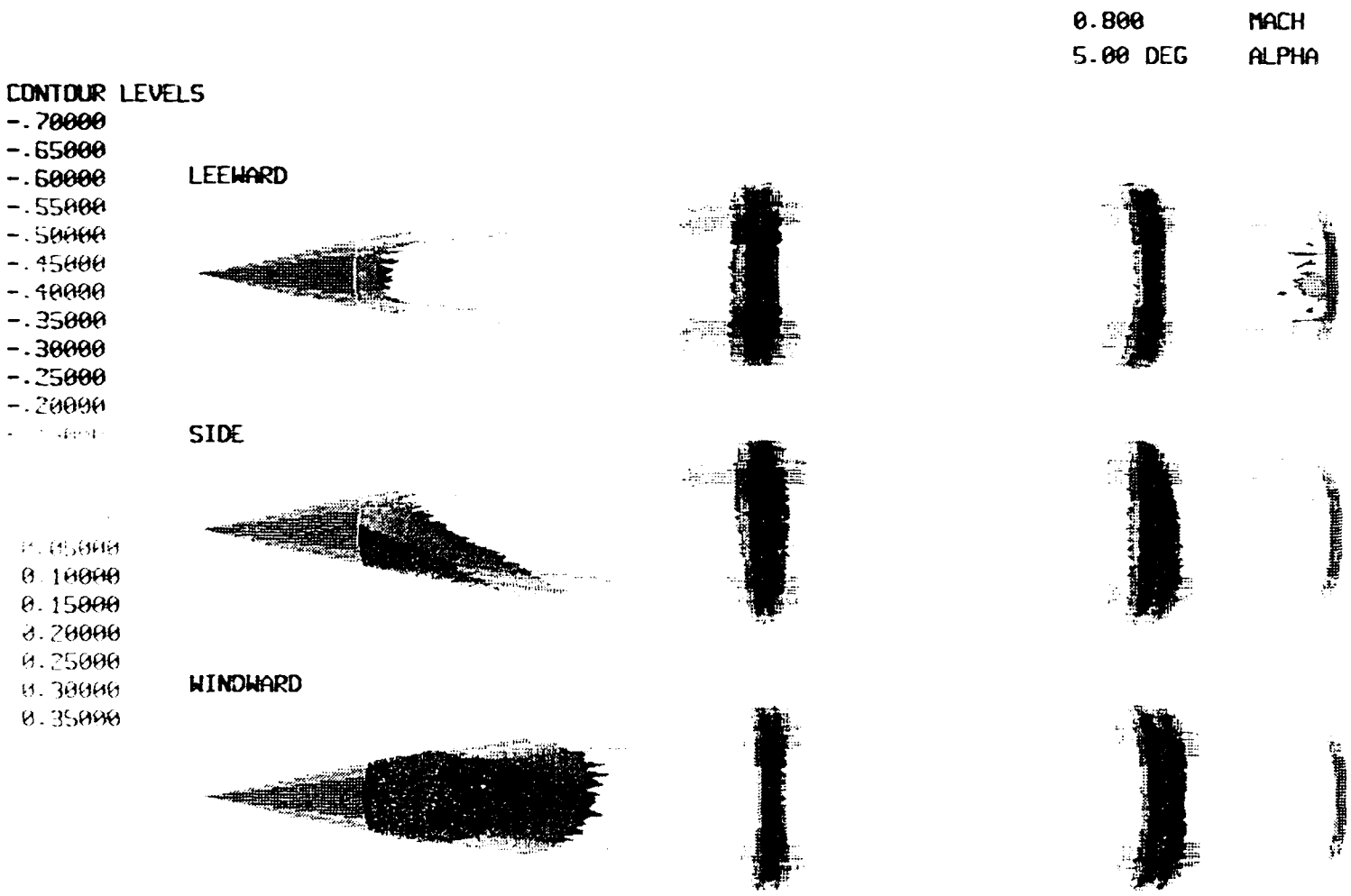


Fig. 21 Surface Pressure Contours



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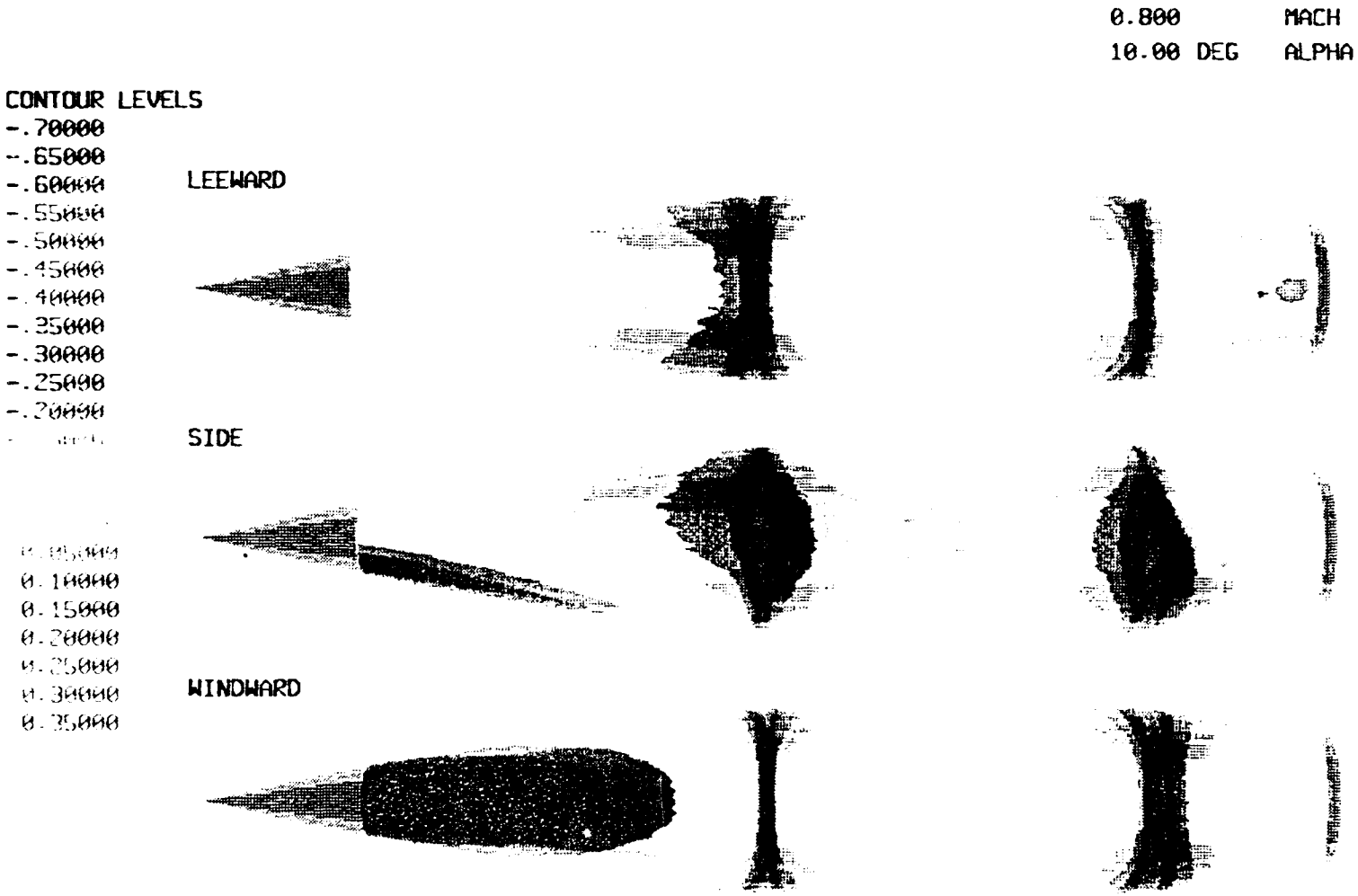

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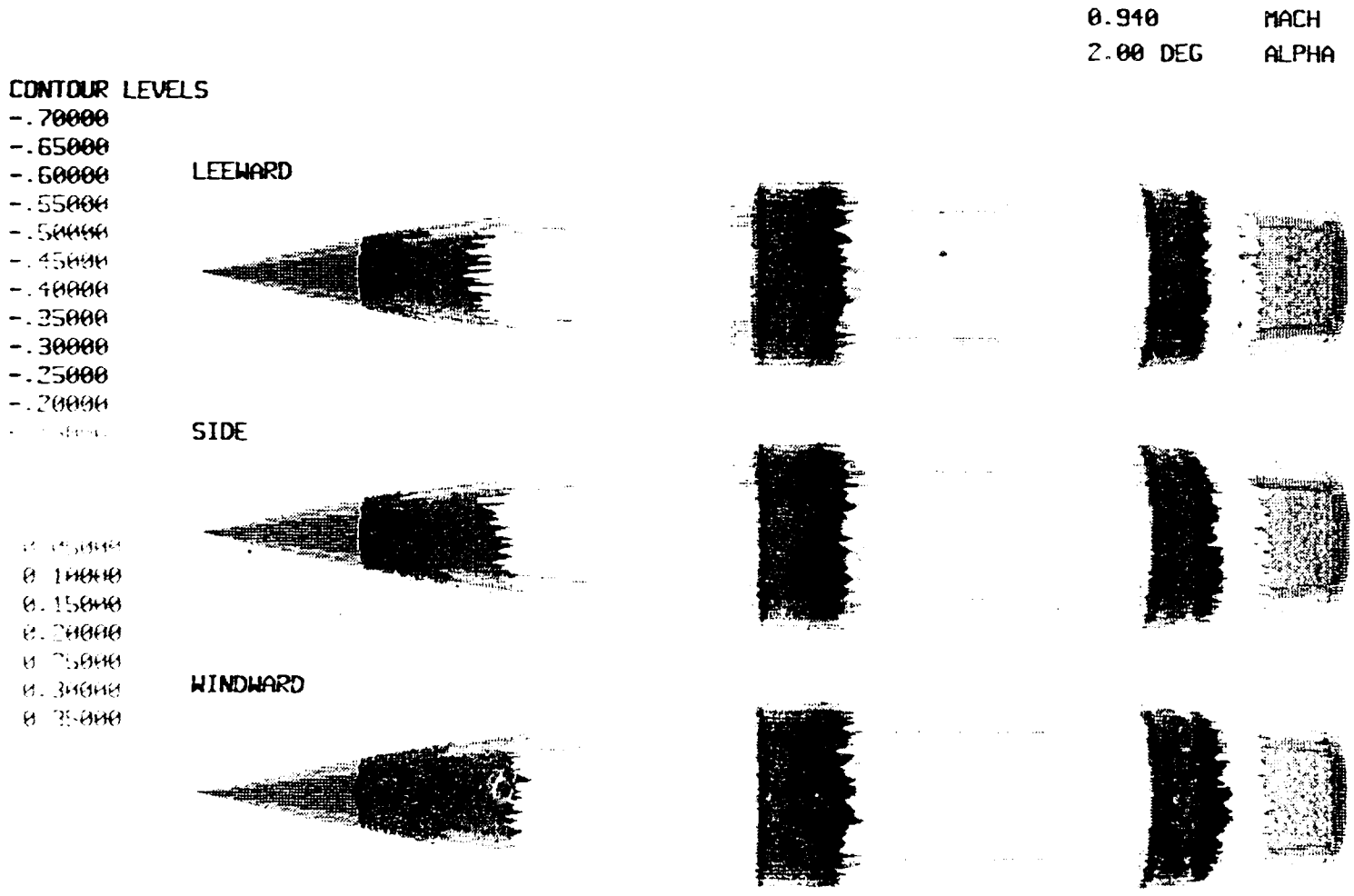
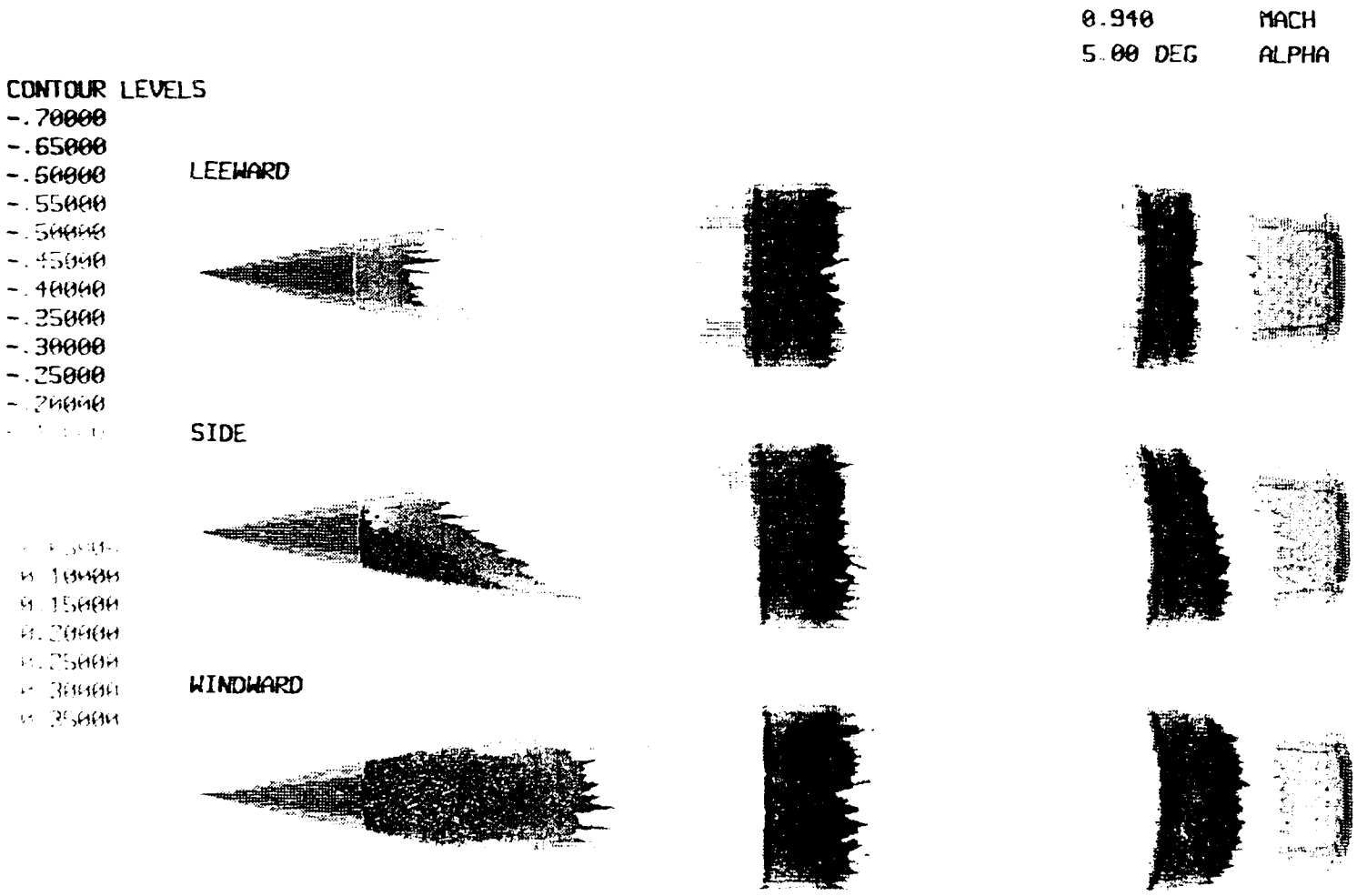


Fig. 22 Surface Pressure Contours



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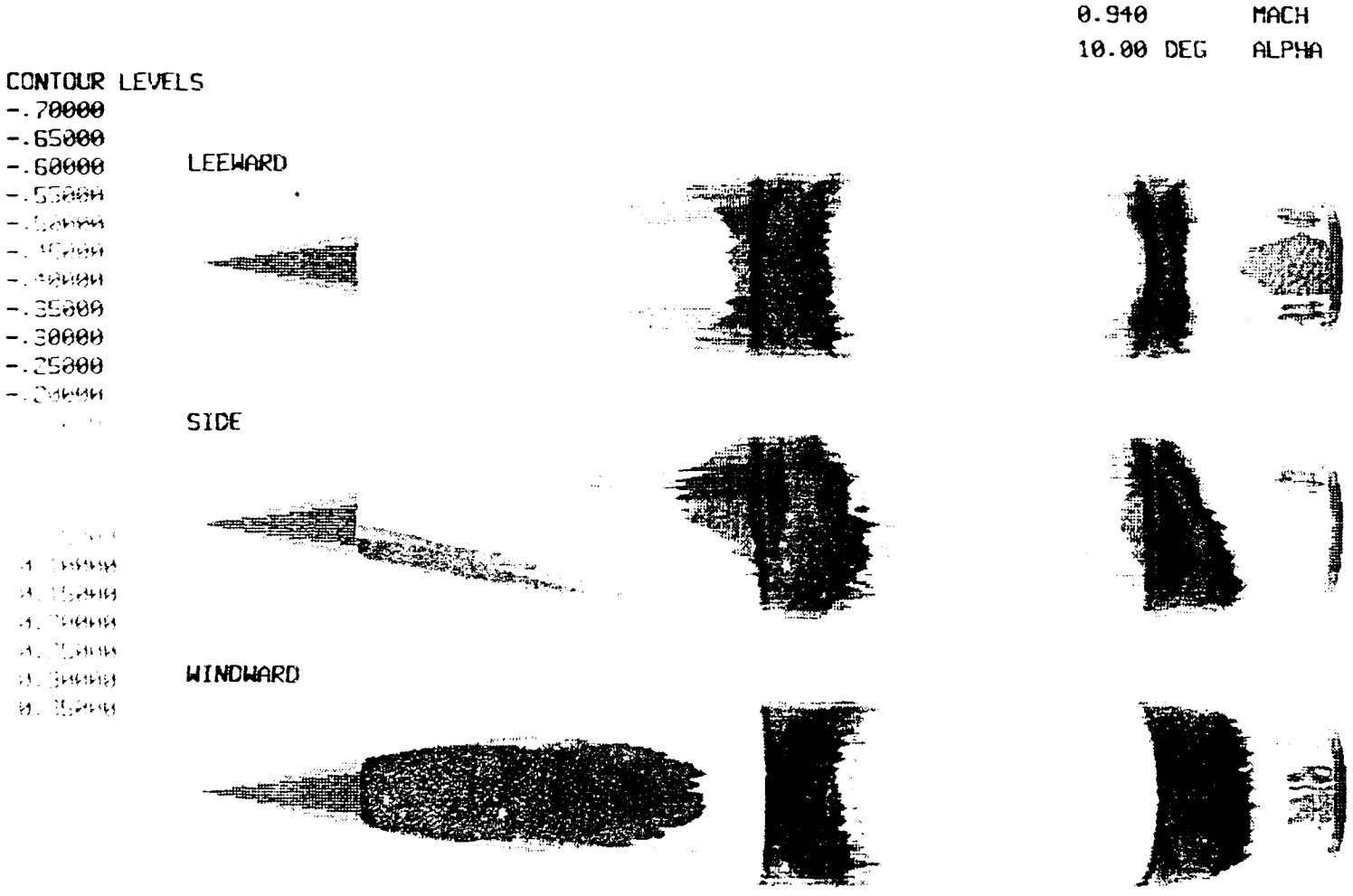

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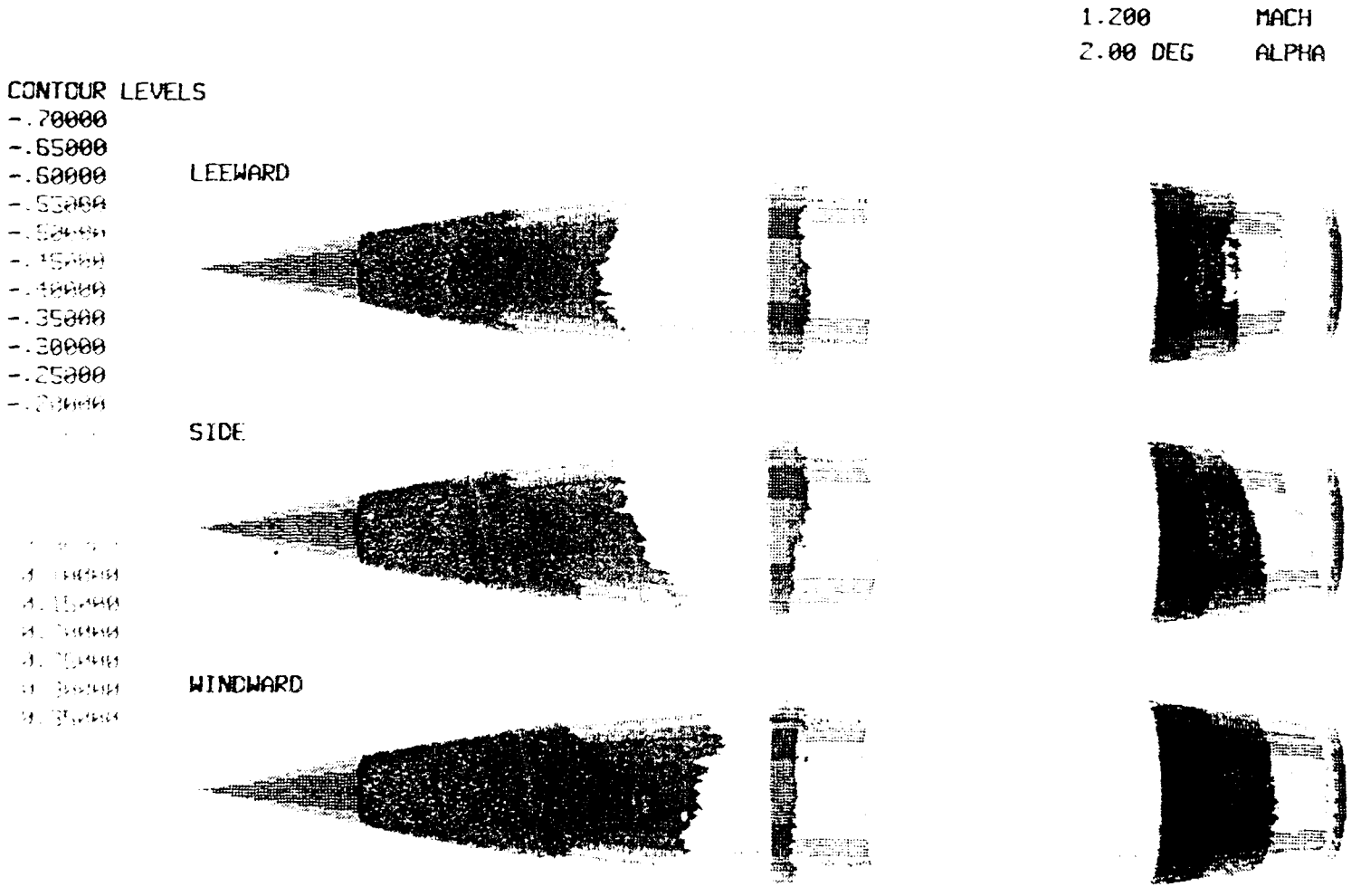


Fig. 23 Surface Pressure Contours

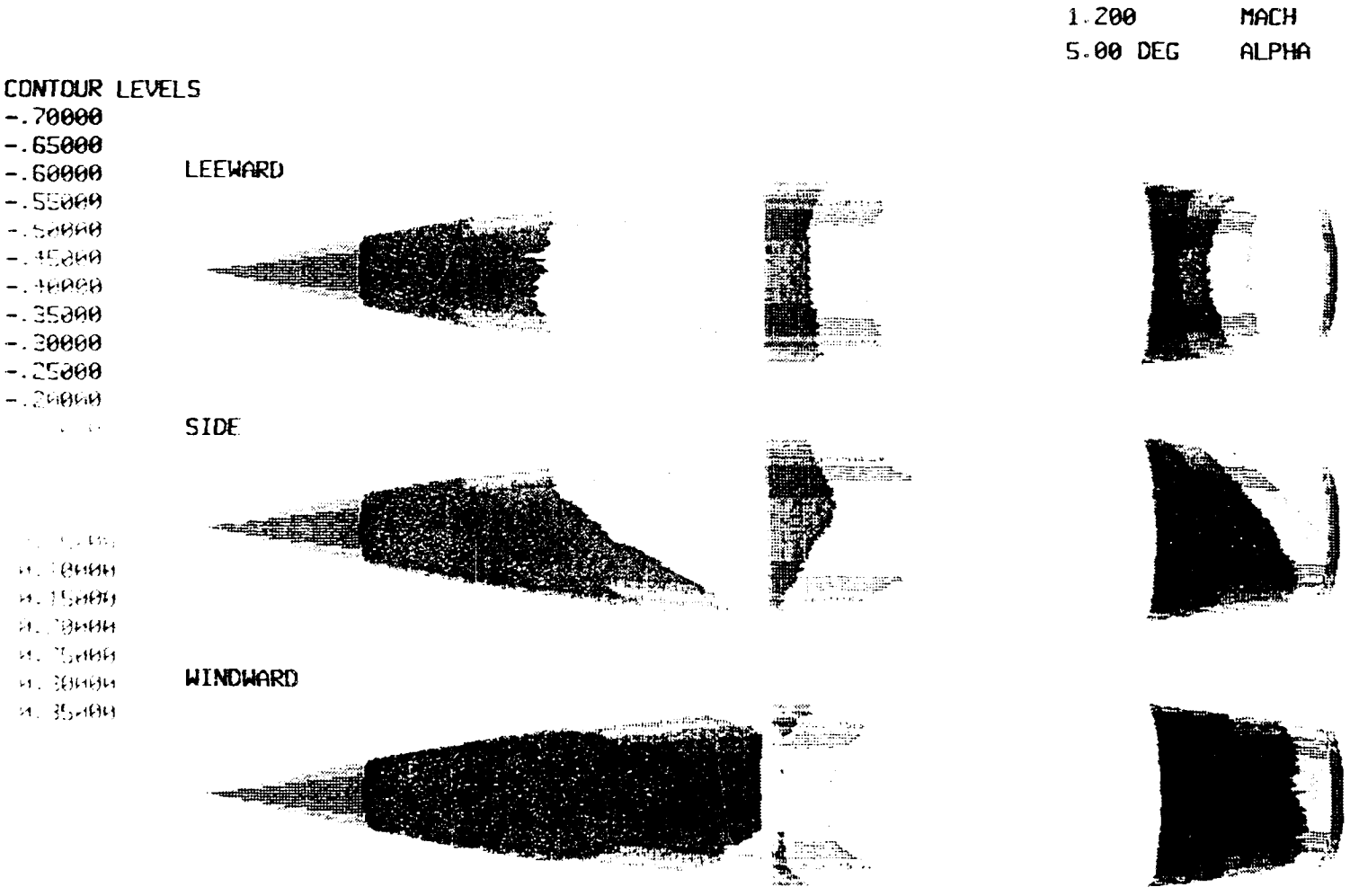
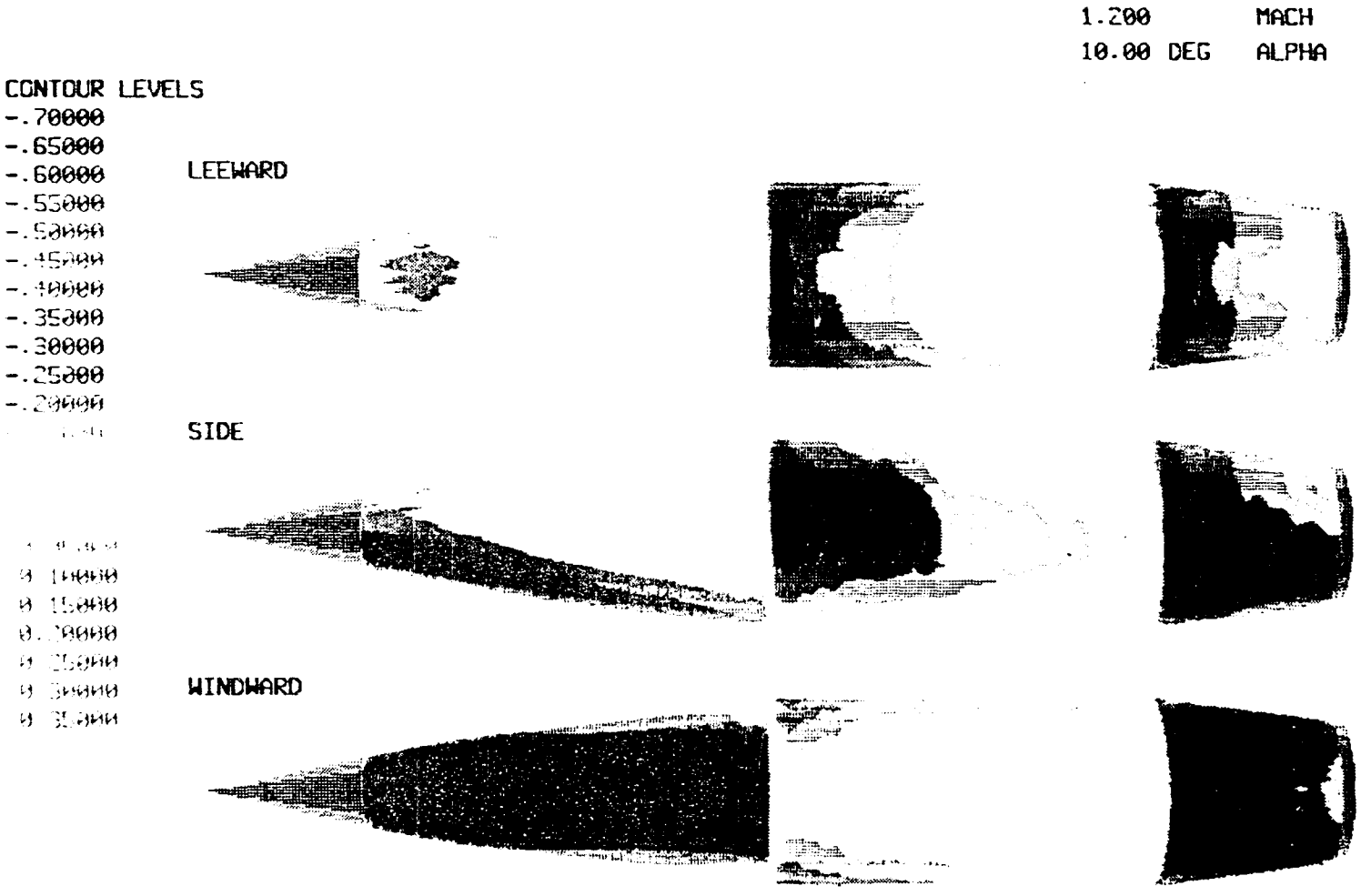


Fig. 23 Continued



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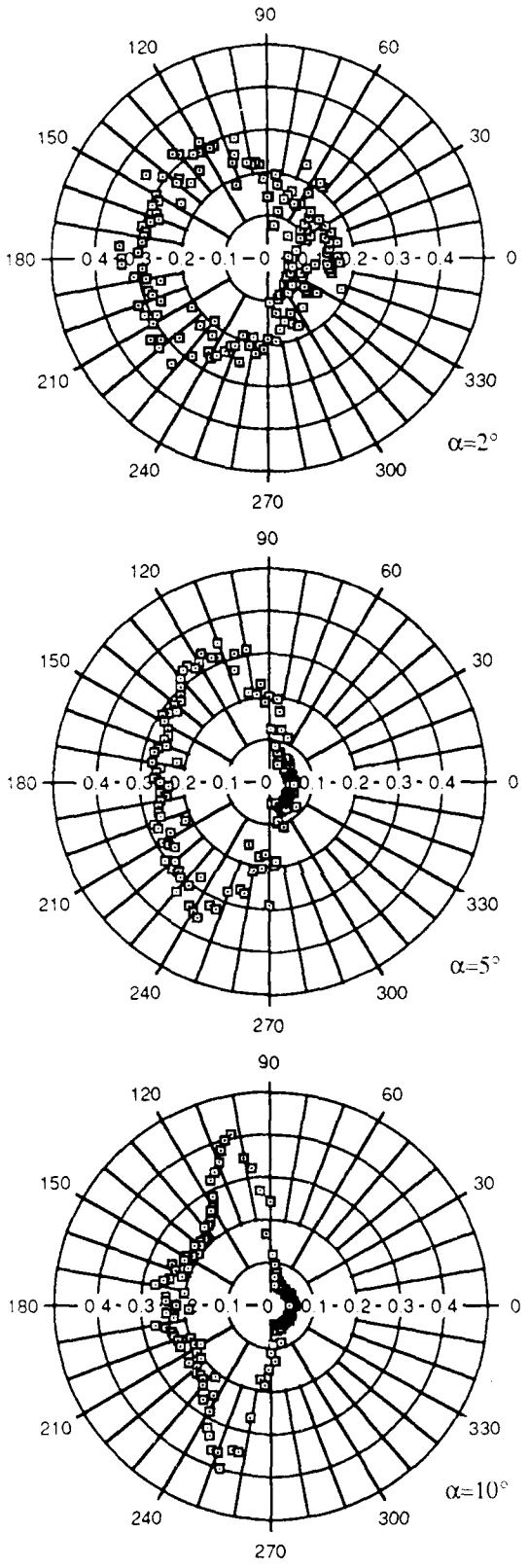


Fig. 24 Surface Pressure Fluctuations, M = 0.94

Fig. 25 Vapor-Screen Flow Visualization,
M = 0.8, α = 10 deg, pd/U = 0

Fig. 26 Vapor-Screen Flow Visualization,
M = 0.8, α = 10 deg, pd/U = 0.3

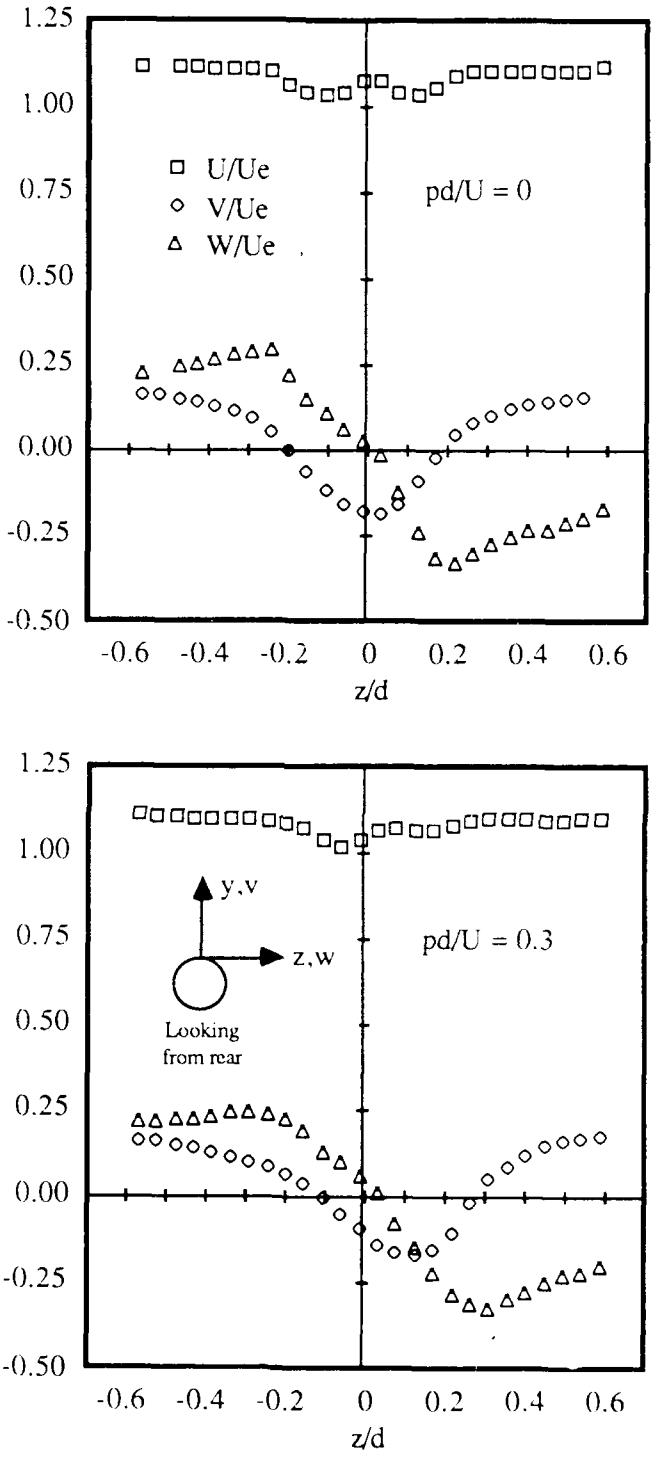
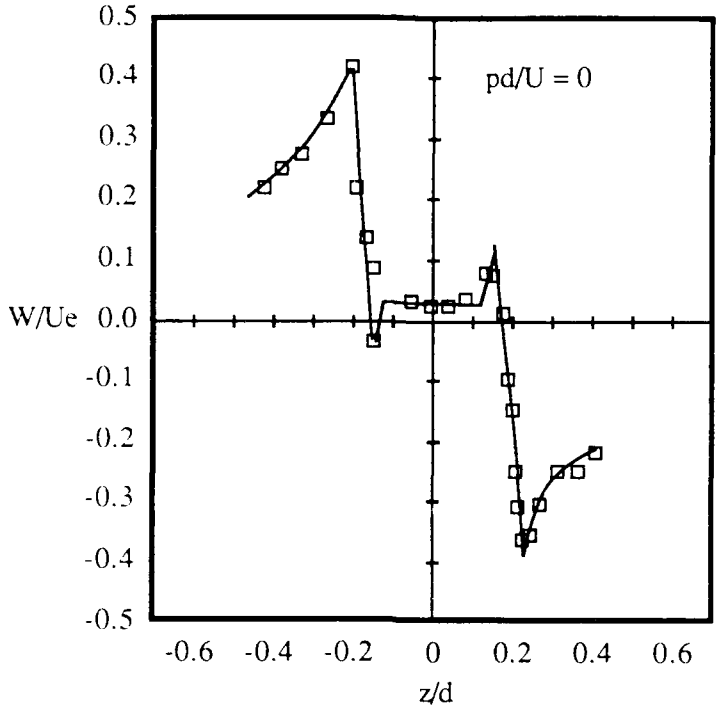


Fig. 27 Model Wake Measurements,
M = 1.2, α = 10 deg, y/d = 0.125, x/d = 5.0



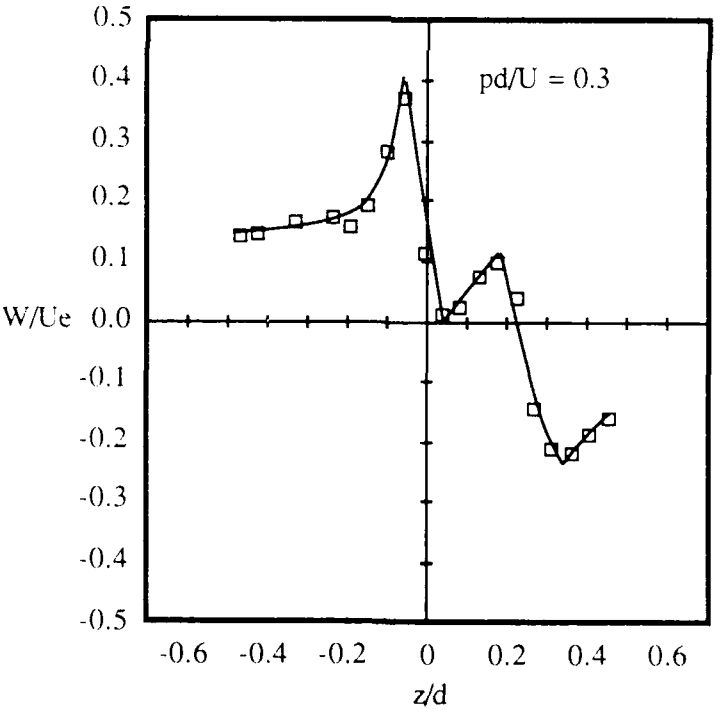


Fig. 28 Crossflow Velocity Profiles,
M = 1.2, α = 10 deg, y/d = 0.024, x/d = 5.0

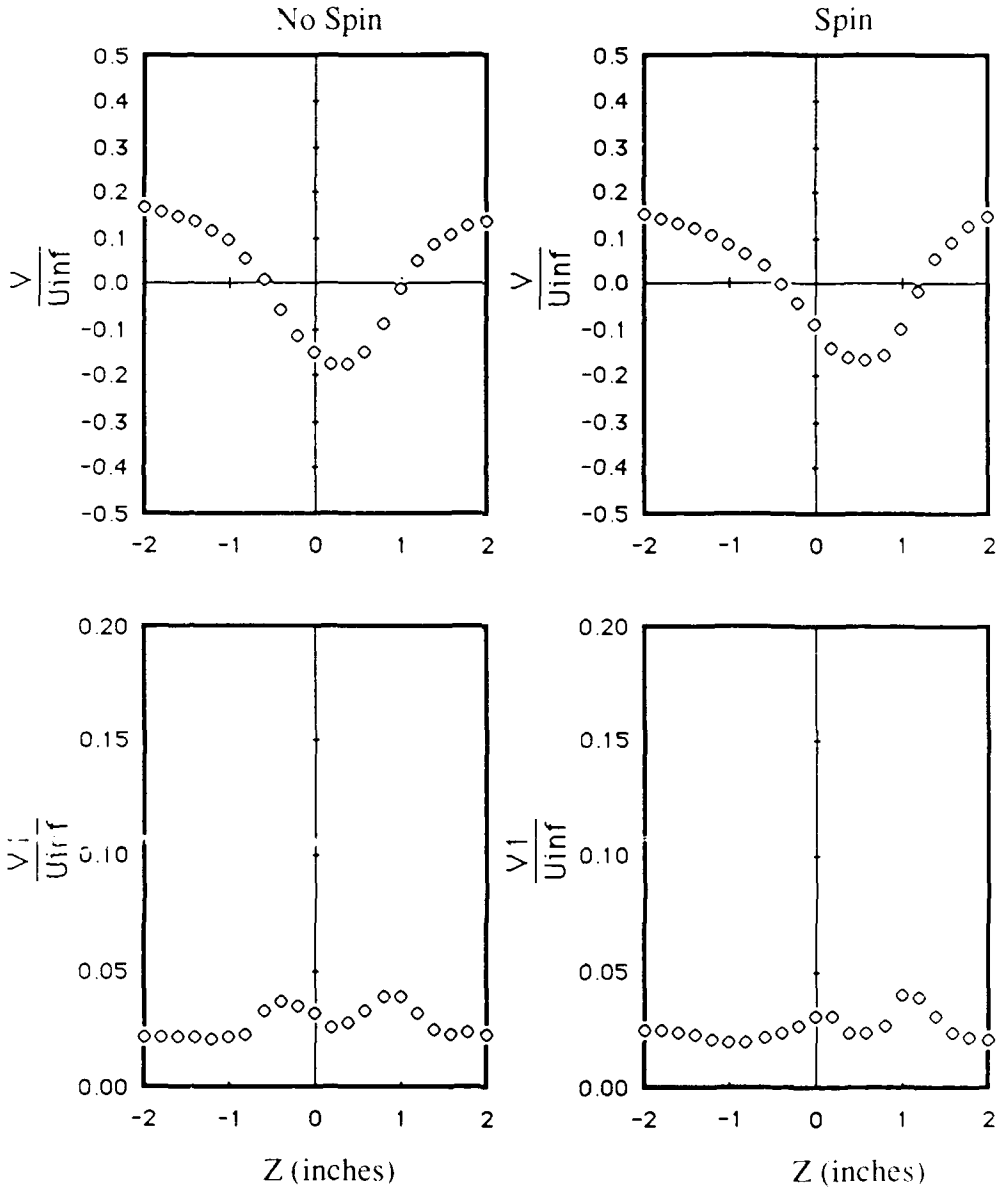


Fig. 29 Mean and Turbulent Downwash Profiles,
M = 1.2, α = 10 deg, y/d = 0.125, x/d = 5.0

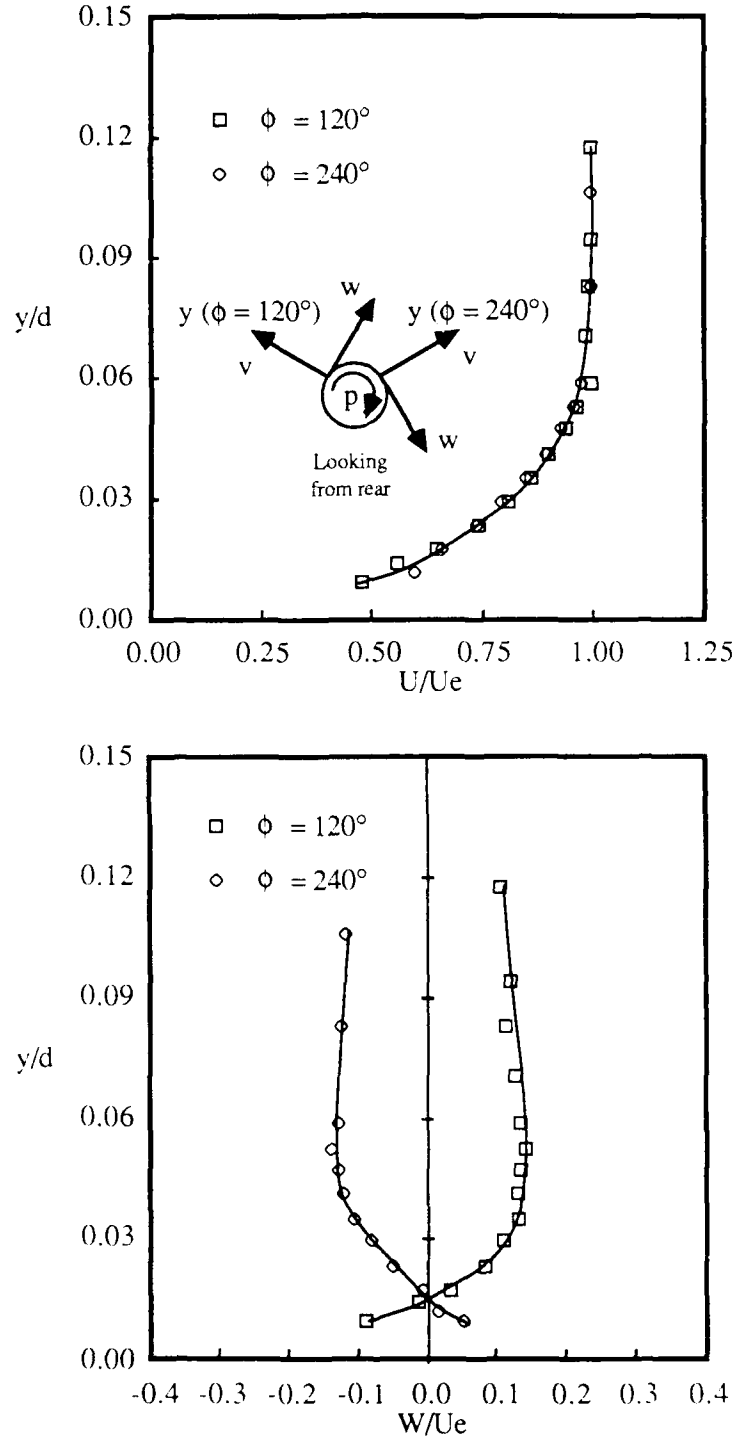


Fig. 30 Axial and Crossflow Velocity Profiles,
M = 0.8, α = 10 deg, x/d = 5.5, pd/U = 0

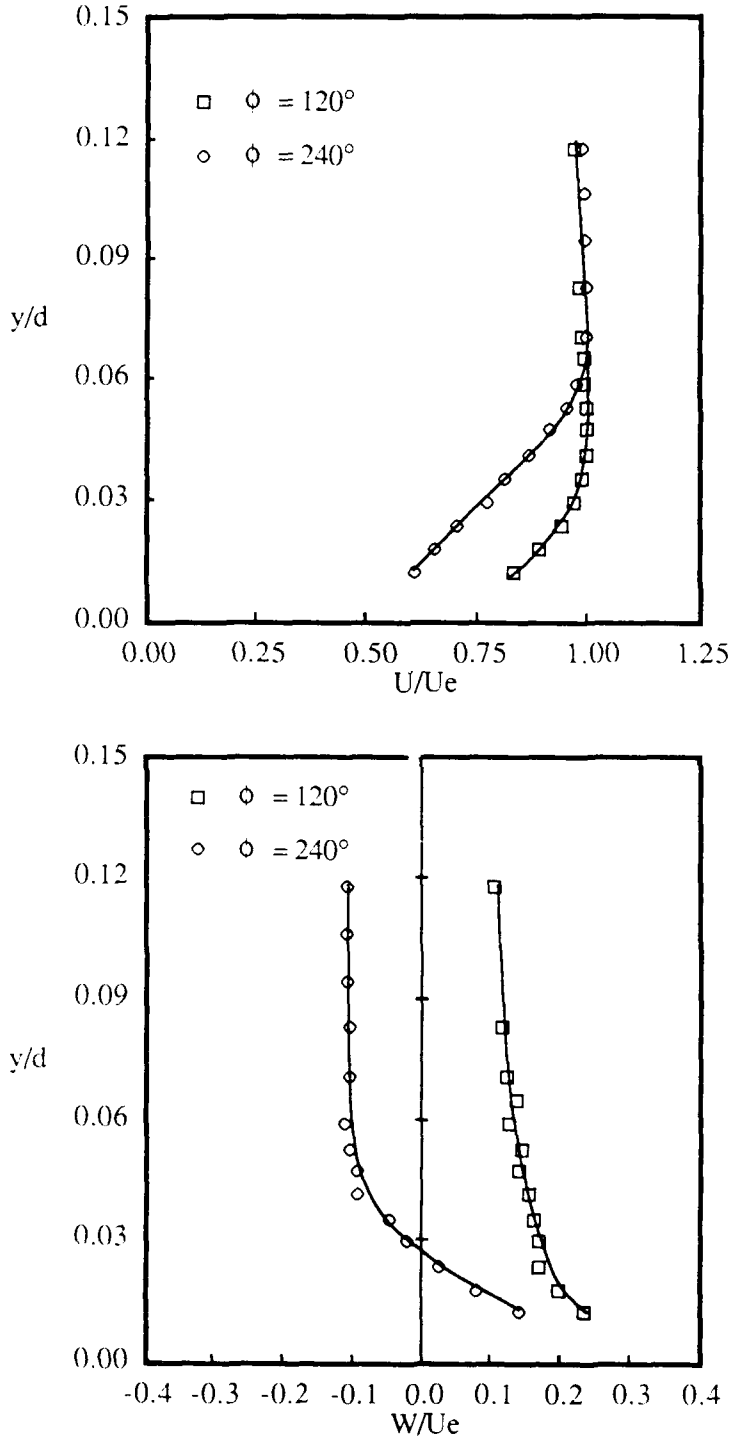


Fig. 31 Axial and Crossflow Velocity Profiles,
M = 0.8, α = 10 deg, x/d = 5.0, pd/U = 0.3

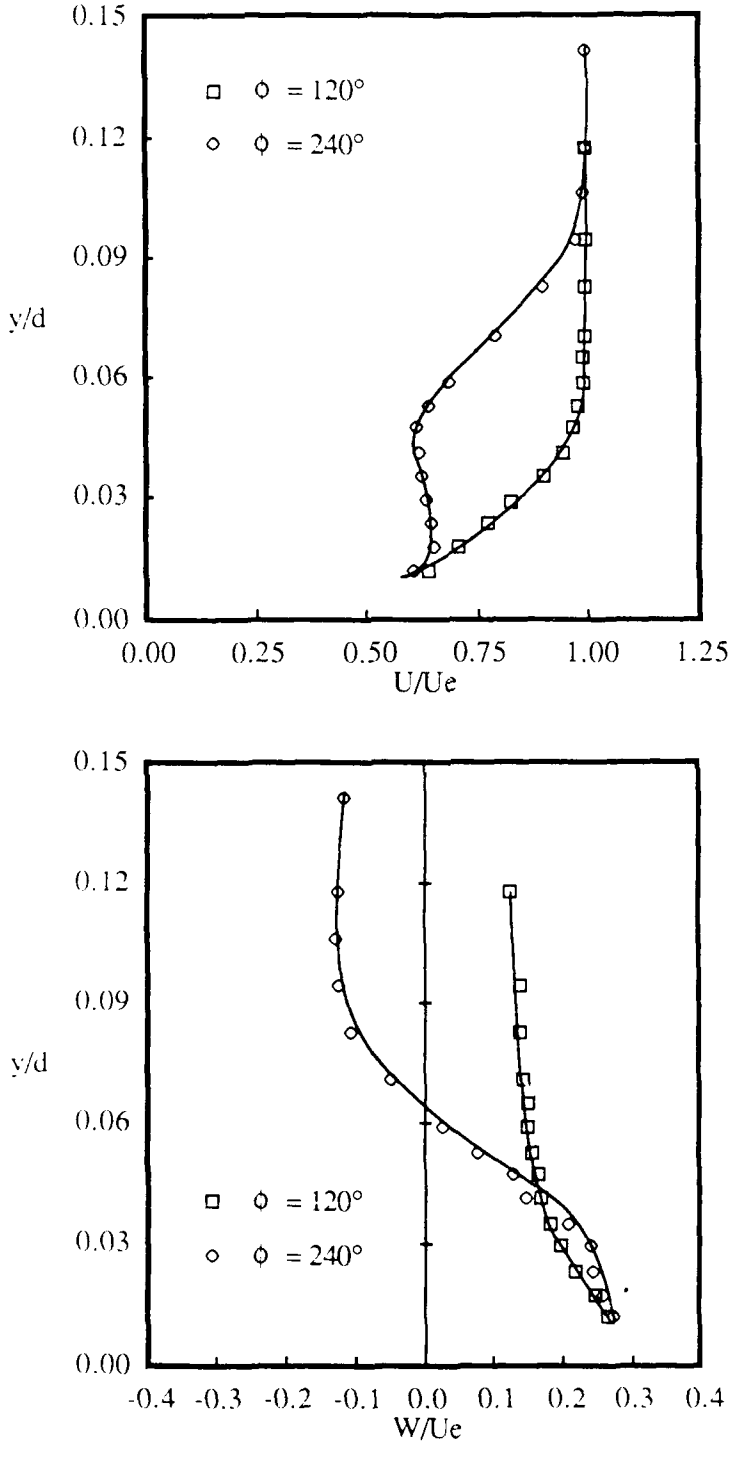


Fig. 32 Axial and Crossflow Velocity Profiles,
M = 0.8, α = 10 deg, x/d = 5.5, pd/U = 0.3

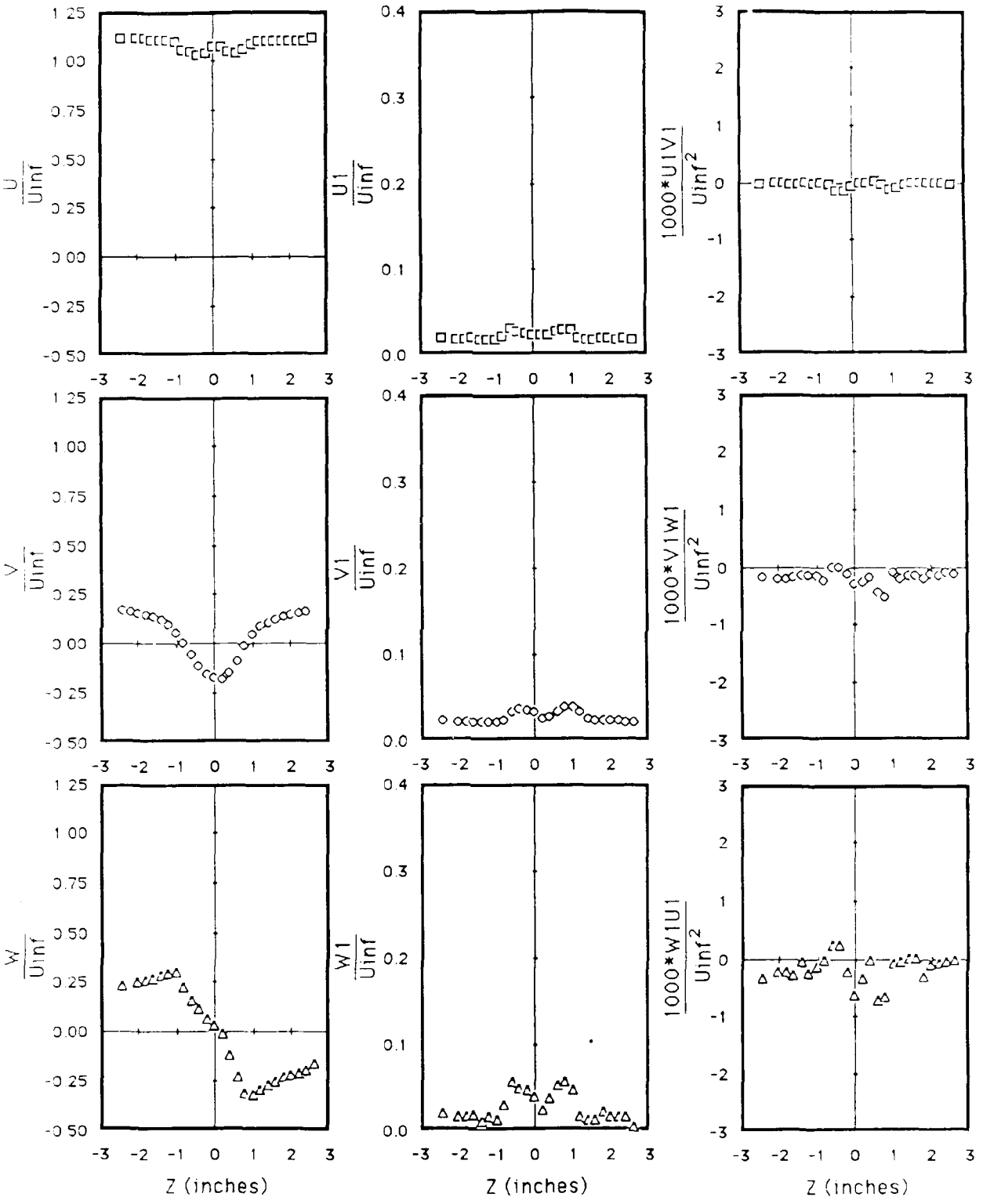


Fig. 33 "On Line" Flow Field Measurements, pd/U = 0

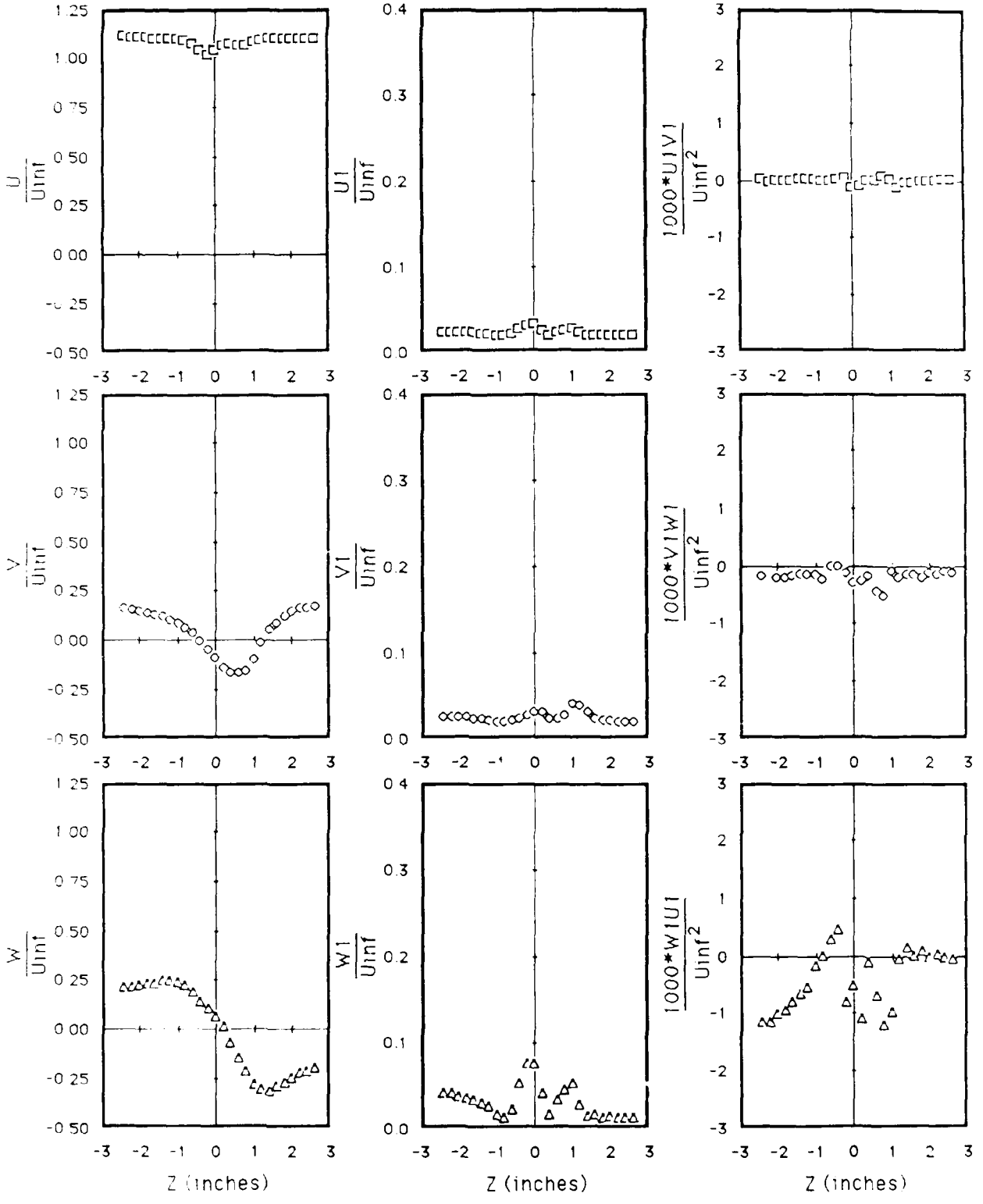


Fig. 34 "On Line" Flow Field Measurements, pd/U = 0.2

Table 1

1. Existing 0.5" pipe plant air supply.
2. Existing 0.5" valve.
3. 0.5" pipe nipple, 3" long.
4. 0.5" street tee.
5. 0.5" to 0.25" pipe reducing bushing.
6. 'NORGREN' 0.5" NPT air filter.
7. 0.75" NPT internal thread to 0.5" NPT external thread reducing adapter.
8. 0.75" pipe to 0.75" tube adapter.
9. 0.75" tube to 0.625" hose adapter.
10. 0.625" nonmetallic hose.
11. 0.5" street elbow.
12. 'NORGREN' 0.5" NPT pressure regulator.
13. 45°, 0.5" street elbow.
14. Existing 0.75" tube assembly from east side flap actuator to top of tunnel.
15. Existing 0.75" tube assembly through rear lead screw.
16. 0.75" to 0.5" tube reducer.
17. 0.5 tube to 0.406" hose adapter.
18. 0.406" nonmetallic hose.
19. Existing 0.375" pipe to 0.5" tube adapter.
20. Existing 0.375" pipe elbow.
21. Existing 0.375" pipe nipple, 1" long.
22. 0.125" pipe nipple, 3" long.
23. 0.125" pipe coupling.
24. Pressure gage, safety type, range from 0-120 psi.

Table 2

Pressure Tap #	Distance from nose (inches)	Distance from nose (calibers)
1	3.778	0.889
2	5.204	1.224
3	6.630	1.560
4	8.037	1.891
5	9.444	2.222
6	10.653	2.507
7	11.862	2.791
8	12.100	2.847
9	12.350	2.906
10	12.600	2.965
11	12.850	3.024
12	13.100	3.082
13	13.298	3.129
14	13.500	3.176
15	13.676	3.218
16	13.875	3.265
17	14.125	3.324
18	14.375	3.382
19	14.625	3.441
20	14.925	3.512
21	15.130	3.560
22	15.375	3.618
23	15.625	3.676
24	15.875	3.735
25	16.125	3.794
26	16.625	3.912
27	17.125	4.029
28	17.625	4.147
29	17.944	4.222
30	18.342	4.316
31	18.842	4.433
32	19.342	4.551
33	19.842	4.669
34	20.342	4.786
35	20.740	4.880
36	20.990	4.939
37	21.200	4.988
38	21.401	5.036
39	21.701	5.106
40	22.043	5.187
41	22.330	5.254
42	22.610	5.320
43	22.860	5.379
44	23.110	5.438
45	23.360	5.497
46	23.649	5.564
47	23.900	5.624
48	24.200	5.694
49	24.574	5.782
50	24.900	5.859
51	25.200	5.929

Appendix 1

Tabulated Wind Tunnel Test Data

TST-575 PH-1 TN-66 1:3 ID-FORCEOUT1 10 AUG 83@17:32 PAGE 1

RUN	TST	P	TN	CONF	PN/L	Q	PT	P	TTF	TF
1	575	1	66	1	3.01	451	1530	1001	78	17

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
3	0.802	10.58	0.0	0.288	-0.224	0.001	0.005	0	0.000		
4	0.800	-4.44	0.0	-0.110	0.033	-0.009	0.024	0	0.000		
5	0.800	-2.35	0.0	-0.058	0.015	-0.011	0.031	0	0.000		
6	0.804	-0.20	0.0	-0.007	0.005	-0.019	0.050	0	0.000		
7	0.800	2.00	0.0	0.048	-0.014	-0.012	0.037	0	0.000		
8	0.800	4.21	0.0	0.103	-0.039	-0.011	0.032	0	0.000		
9	0.799	6.31	0.0	0.156	-0.062	-0.006	0.022	0	0.000		
10	0.799	8.42	0.0	0.215	-0.113	-0.002	0.014	0	0.000		
11	0.801	10.57	0.0	0.292	-0.233	0.004	-0.000	0	0.000		
12	0.800	-0.19	0.0	-0.005	-0.001	-0.012	0.033	0	0.000		

TST-575 PH-1 TN-66 15:1 ID-FCRCEOUT1 10 AUG 83@17:32 PAGE 15

RUN	TST	P	TN	CONF	RN/L	Q	PT	P	TTF	TF
15	575	1	66	1	3.04	464	1573	1030	85	23

SEQ	MACH	ALPHA	CONE	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.802	10.58	0.0	0.296	-0.258	-0.044	0.198	6927	0.297	-0.150	0.667
2	0.803	10.57	0.0	0.298	-0.267	-0.039	0.169	6123	0.263	-0.148	0.645
3	0.803	10.57	0.0	0.293	-0.248	-0.031	0.140	4813	0.206	-0.152	0.676
4	0.801	10.58	0.0	0.289	-0.232	-0.024	0.107	3827	0.164	-0.146	0.653
5	0.802	10.58	0.0	0.288	-0.224	-0.020	0.089	2993	0.129	-0.155	0.691
6	0.803	10.58	0.0	0.290	-0.226	-0.014	0.064	2443	0.105	-0.129	0.611
7	0.802	10.58	0.0	0.290	-0.228	-0.006	0.037	1777	0.076	-0.081	0.490
8	0.803	10.58	0.0	0.289	-0.221	-0.005	0.026	1197	0.051	-0.094	0.498
9	0.803	10.58	0.0	0.282	-0.200	-0.004	0.018	730	0.031	-0.138	0.581
10	0.803	10.58	0.0	0.285	-0.207	-0.002	0.008	380	0.016	-0.109	0.514
11	0.802	10.58	0.0	0.287	-0.218	-0.001	0.003	97	0.004		
12	0.801	10.58	0.0	0.290	-0.224	0.000	-0.001	3	0.000		
13	0.802	10.58	0.0	0.283	-0.204	-0.003	0.009	40	0.002		
14	0.803	10.58	0.0	0.286	-0.213	0.002	-0.003	53	0.002		
15	0.803	10.58	0.0	0.285	-0.210	-0.000	-0.002	-20	-0.001		
16	0.802	10.58	0.0	0.283	-0.205	0.002	-0.006	-7	-0.000		
17	0.801	10.58	0.0	0.283	-0.201	-0.001	0.005	7	0.000		
18	0.803	10.58	0.0	0.283	-0.206	-0.002	0.004	-3	-0.000		
19	0.804	10.59	0.0	0.290	-0.224	0.000	0.000	-17	-0.001		
20	0.803	10.58	0.0	0.283	-0.204	0.002	-0.003	37	0.002		
21	0.803	10.58	0.0	0.283	-0.204	-0.000	0.002	23	0.001		

C_y C_n

RUN	TST	P	TN	CONF	RN/L	Q	PT	P	TTF	TF
17	575	1	66	1	3.03	461	1567	1027	85	23

SEQ	MACH	ALPHA	CONE	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.801	8.48	0.0	0.217	-0.112	-0.027	0.120	4587	0.197	-0.136	0.609
2	0.801	8.48	0.0	0.224	-0.143	-0.039	0.177✓	6913	0.297	-0.131	0.595
3	0.797	8.47	0.0	0.222	-0.146	-0.036	0.159	6580	0.284	-0.127	0.560
4	0.795	8.48	0.0	0.225	-0.148	-0.024	0.116	4843	0.210	-0.117	0.554
5	0.795	8.48	0.0	0.217	-0.119	-0.020	0.092	3607	0.156	-0.127	0.592
6	0.800	8.48	0.0	0.216	-0.108	-0.012	0.060	2587	0.111	-0.107	0.538
7	0.801	8.48	0.0	0.216	-0.109	-0.008	0.044	1810	0.078	-0.108	0.564
8	0.800	8.48	0.0	0.217	-0.107	-0.003	0.022	1100	0.047	-0.065	0.459
9	0.804	8.48	0.0	0.214	-0.097	-0.005	0.018	643	0.028	-0.166	0.655
10	0.800	8.48	0.0	0.217	-0.108	-0.001	0.008✓	167	0.007		

C_y C_n

RUN	TST	P	TN	CONF	PN/L	Q	PT	P	TTF	TF
18	575	1	66	1	3.03	461	1566	1025	84	22

SEQ	MACH	ALPHA	CONE	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.802	6.31	0.0	0.155	-0.053	-0.018	0.081	4610	0.198	-0.091	0.409
2	0.802	6.31	0.0	0.152	-0.043	-0.020	0.085	4607	0.198	-0.101	0.428
3	0.800	6.31	0.0	0.153	-0.047	-0.015	0.072	4540	0.195	-0.075	0.369
4	0.801	6.31	0.0	0.155	-0.058	-0.027	0.122	6940	0.299	-0.090	0.408
5	0.802	6.31	0.0	0.155	-0.058	-0.027	0.123	6837	0.294	-0.091	0.417
6	0.803	6.31	0.0	0.158	-0.067	-0.028	0.124✓	6870	0.295	-0.095	0.420
7	0.800	6.31	0.0	0.156	-0.061	-0.026	0.117	6800	0.293	-0.088	0.401
8	0.797	6.31	0.0	0.159	-0.077	-0.020	0.093	5787	0.250	-0.080	0.373
9	0.797	6.31	0.0	0.156	-0.065	-0.019	0.079	4523	0.195	-0.099	0.402
10	0.801	6.31	0.0	0.155	-0.057	-0.015	0.061	3517	0.151	-0.100	0.401
11	0.803	6.31	0.0	0.154	-0.055	-0.009	0.040	2667	0.115	-0.079	0.346
12	0.800	6.31	0.0	0.152	-0.048	-0.006	0.025	1893	0.082	-0.068	0.309
13	0.800	6.31	0.0	0.155	-0.058	-0.003	0.013	1330	0.057	-0.050	0.223
14	0.801	6.31	0.0	0.155	-0.059	-0.003	0.011	817	0.035	-0.097	0.322
15	0.799	6.31	0.0	0.152	-0.049	-0.006	0.017	447	0.019	-0.306	0.903
16	0.798	6.31	0.0	0.154	-0.051	-0.000	-0.001	130	0.006		
17	0.797	6.31	0.0	0.153	-0.051	-0.002	0.004	10	0.000		

RUN	TST	P	TN	CONF	RN/L	Q	PT	P	TTF	TF
19	575	1	66	1	3.03	461	1566	1026	84	22

SEQ	MACH	ALPHA	CONE	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.802	4.18	0.0	0.099	-0.018	-0.010	0.045	4587	0.197	-0.051	0.229
2	0.802	4.18	0.0	0.099	-0.017	-0.013	0.053	4573	0.197	-0.066	0.269
3	0.801	4.18	0.0	0.100	-0.021	-0.014	0.054	4553	0.196	-0.071	0.274
4	0.796	4.18	0.0	0.103	-0.034	-0.021	0.083	6870	0.297	-0.069	0.278
5	0.796	4.18	0.0	0.102	-0.028	-0.017	0.075	6857	0.297	-0.059	0.254
6	0.798	4.18	0.0	0.102	-0.030	-0.020	0.083	6860	0.296	-0.067	0.280
7	0.803	4.18	0.0	0.101	-0.026	-0.018	0.075	6853	0.294	-0.060	0.254
8	0.801	4.18	0.0	0.103	-0.033	-0.013	0.050	5917	0.255	-0.050	0.197
9	0.797	4.18	0.0	0.102	-0.030	-0.009	0.036	4680	0.202	-0.044	0.180
10	0.797	4.18	0.0	0.102	-0.032	-0.006	0.025	3597	0.155	-0.040	0.161
11	0.799	4.18	0.0	0.101	-0.026	-0.004	0.018	2840	0.123	-0.030	0.149
12	0.798	4.18	0.0	0.102	-0.031	-0.007	0.023	2153	0.093	-0.071	0.249
13	0.797	4.18	0.0	0.099	-0.024	-0.006	0.019	1497	0.065	-0.091	0.300
14	0.799	4.18	0.0	0.101	-0.028	-0.003	0.011	1027	0.044	-0.071	0.243
15	0.801	4.18	0.0	0.101	-0.027	-0.003	0.010	633	0.027	-0.117	0.360
16	0.801	4.18	0.0	0.100	-0.026	-0.005	0.014	360	0.015	-0.312	0.872
17	0.799	4.18	0.0	0.103	-0.034	-0.002	0.006	107	0.005		

RUN	TST	P	TN	CONF	RN/L	Q	PT	P	TTF	TF
23	575	1	66	1	3.01	579	1393	572	85	-37

SEQ	MACH	ALPHA	CONE	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
						C_Y	C_{N_β}				
3	1.203	10.70	0.0	0.408	-0.617	0.009	-0.016	83	0.003		
4	1.200	10.70	0.0	0.408	-0.621	0.005	-0.007	33	0.001		
5	1.200	10.70	0.0	0.406	-0.618	0.011	-0.020	67	0.002		
6	1.201	10.70	0.0	0.405	-0.607	0.010	-0.018	43	0.001		
7	1.201	10.70	0.0	0.406	-0.614	0.007	-0.011	43	0.001		
8	1.200	10.69	0.0	0.412	-0.640	-0.025	0.138	6503	0.199	-0.125	0.695
9	1.200	10.69	0.0	0.411	-0.637	-0.023	0.136	6440	0.197	-0.114	0.689
10	1.200	10.70	0.0	0.410	-0.627	-0.024	0.136	6407	0.196	-0.120	0.696
11	1.200	10.70	0.0	0.412	-0.638	-0.024	0.138	6373	0.195	-0.122	0.710
12	1.200	10.69	0.0	0.408	-0.627	-0.020	0.127	6423	0.196	-0.101	0.645
13	1.201	10.70	0.0	0.415	-0.655	-0.038	0.208	9647	0.295	-0.130	0.706
14	1.200	10.70	0.0	0.418	-0.664	-0.038	0.206	9703	0.297	-0.127	0.695
15	1.201	10.71	0.0	0.416	-0.649	-0.040	0.215	9773	0.299	-0.135	0.720
16	1.202	10.71	0.0	0.414	-0.647	-0.041	0.215	9773	0.298	-0.138	0.721
17	1.202	10.71	0.0	0.417	-0.656	-0.040	0.215✓	✓9767	0.298	-0.135	0.720
18	1.202	10.70	0.0	0.416	-0.653	-0.035	0.195	9553	0.292	-0.121	0.668
19	1.202	10.70	0.0	0.415	-0.654	-0.035	0.179	8383	0.256	-0.137	0.699
20	1.201	10.71	0.0	0.415	-0.651	-0.023	0.140	7243	0.221	-0.104	0.632
21	1.201	10.71	0.0	0.412	-0.636	-0.015	0.111	6217	0.190	-0.078	0.585
22	1.202	10.71	0.0	0.408	-0.621	-0.015	0.101	5367	0.164	-0.094	0.619
23	1.202	10.72	0.0	0.408	-0.621	-0.013	0.090	4600	0.140	-0.094	0.641
24	1.201	10.72	0.0	0.408	-0.617	-0.009	0.071	3883	0.119	-0.075	0.598
25	1.201	10.72	0.0	0.409	-0.621	-0.003	0.049	3217	0.098	-0.035	0.500
26	1.201	10.71	0.0	0.406	-0.612	-0.006	0.051	2707	0.083	-0.075	0.615
27	1.201	10.72	0.0	0.405	-0.605	-0.001	0.035	2207	0.067	-0.015	0.527
28	1.201	10.72	0.0	0.406	-0.609	0.002	0.023	1787	0.055	0.040	0.420
29	1.201	10.72	0.0	0.408	-0.616	0.003	0.015	1390	0.042	0.061	0.350
30	1.201	10.72	0.0	0.407	-0.614	0.005	0.006	1103	0.034	0.159	0.172
31	1.201	10.72	0.0	0.407	-0.611	0.006	0.001	733	0.022	0.267	0.033
32	1.201	10.72	0.0	0.406	-0.610	0.006	-0.002	463	0.014	0.410	-0.148

RUN	TST	P	TN	CONF	RN/M	Q	PT	P	TTF	TF
24	575	1	66	1	3.08	579	1392	572	90	-33

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	8.58	0.0	0.297	-0.351	0.007	-0.010	30	0.001		
2	1.201	8.58	0.0	0.297	-0.352	0.006	-0.010	47	0.001		
3	1.201	8.59	0.0	0.297	-0.354	0.008	-0.014	57	0.002		
4	1.201	8.58	0.0	0.298	-0.356	0.010	-0.019	47	0.001		
5	1.202	8.58	0.0	0.297	-0.352	0.007	-0.009	110	0.003		
6	1.202	8.58	0.0	0.299	-0.363	-0.022	0.120	6453	0.197	-0.111	0.612
7	1.201	8.57	0.0	0.301	-0.370	-0.018	0.110	6353	0.194	-0.091	0.570
8	1.201	8.58	0.0	0.301	-0.371	-0.022	0.121	6367	0.194	-0.113	0.623
9	1.200	8.58	0.0	0.300	-0.369	-0.023	0.122	6373	0.194	-0.119	0.627
10	1.200	8.57	0.0	0.301	-0.373	-0.020	0.114	6317	0.193	-0.105	0.592
11	1.201	8.59	0.0	0.305	-0.390	-0.032	0.172	9697	0.296	-0.107	0.582
12	1.201	8.58	0.0	0.305	-0.390	-0.036	0.183	9653	0.294	-0.122	0.627
13	1.201	8.59	0.0	0.307	-0.395	-0.030	0.169	9507	0.293	-0.103	0.579
14	1.200	8.58	0.0	0.304	-0.388	-0.033	0.176	✓ 9630	0.293	-0.113	0.607
15	1.200	8.58	0.0	0.306	-0.396	-0.032	0.174	9593	0.292	-0.110	0.596
16	1.200	8.59	0.0	0.306	-0.392	-0.031	0.170	9557	0.291	-0.105	0.585
17	1.200	8.59	0.0	0.310	-0.409	-0.027	0.152	9267	0.282	-0.094	0.539
18	1.200	8.58	0.0	0.304	-0.387	-0.022	0.132	7777	0.237	-0.095	0.559
19	1.201	8.58	0.0	0.302	-0.379	-0.017	0.109	6647	0.202	-0.084	0.539
20	1.201	8.59	0.0	0.302	-0.375	-0.016	0.097	5803	0.177	-0.088	0.549
21	1.201	8.59	0.0	0.302	-0.371	-0.011	0.081	4993	0.152	-0.075	0.532
22	1.201	8.59	0.0	0.301	-0.367	-0.007	0.063	4230	0.129	-0.056	0.492
23	1.201	8.60	0.0	0.301	-0.366	-0.003	0.049	3603	0.110	-0.030	0.442
24	1.201	8.59	0.0	0.299	-0.360	-0.005	0.048	3090	0.094	-0.058	0.509
25	1.201	8.59	0.0	0.298	-0.358	-0.006	0.043	2633	0.080	-0.071	0.532
26	1.201	8.59	0.0	0.300	-0.363	0.002	0.020	2157	0.066	0.032	0.303
27	1.201	8.58	0.0	0.299	-0.362	0.003	0.013	1793	0.055	0.051	0.239
28	1.201	8.57	0.0	0.297	-0.355	0.008	-0.003	1397	0.043	0.190	-0.068
29	1.200	8.57	0.0	0.297	-0.359	0.012	-0.015	1027	0.031	0.368	-0.492
30	1.200	8.58	0.0	0.298	-0.359	0.007	-0.008	743	0.023	0.310	-0.371
31	1.200	8.58	0.0	0.300	-0.363	0.007	-0.009	433	0.013	0.517	-0.657

RUN	TST	P	TN	CONF	PN/L	Q	PT	P	TTF	TF
25	575	1	66	1	3.00	587	1412	591	92	-32

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	6.38	0.0	0.209	-0.196	0.007	-0.004	100	0.003		
2	1.202	6.38	0.0	0.207	-0.194	0.001	0.008	93	0.003		
3	1.202	6.38	0.0	0.207	-0.193	0.003	0.005	47	0.001		
4	1.202	6.38	0.0	0.208	-0.197	0.006	-0.005	27	0.001		
5	1.202	6.38	0.0	0.206	-0.188	0.004	0.004	80	0.002		
6	1.202	6.38	0.0	0.209	-0.197	-0.018	0.099	6503	0.198	-0.089	0.500
7	1.201	6.38	0.0	0.209	-0.198	-0.012	0.085	6633	0.202	-0.058	0.421
8	1.201	6.38	0.0	0.209	-0.200	-0.014	0.091	6643	0.202	-0.069	0.452
9	1.201	6.38	0.0	0.208	-0.196	-0.012	0.085	6633	0.202	-0.061	0.423
10	1.202	6.38	0.0	0.207	-0.195	-0.017	0.098	6447	0.196	-0.087	0.500
11	1.200	6.37	0.0	0.210	-0.209	-0.023	0.129	9810	0.299	-0.077	0.433
12	1.201	6.38	0.0	0.212	-0.212	-0.025	0.139	9830	0.299	-0.084	0.465
13	1.201	6.38	0.0	0.213	-0.215	-0.025	0.140	9877	0.301	-0.084	0.465
14	1.202	6.38	0.0	0.213	-0.215	-0.027	0.146	9883	0.301	-0.089	0.487
15	1.202	6.38	0.0	0.212	-0.213	-0.019	0.126	9753	0.297	-0.064	0.424
16	1.201	6.37	0.0	0.213	-0.220	-0.018	0.116	9217	0.281	-0.064	0.398
17	1.203	6.38	0.0	0.213	-0.213	-0.015	0.097	7947	0.242	-0.060	0.403
18	1.203	6.38	0.0	0.210	-0.206	-0.012	0.086	6807	0.207	-0.060	0.417
19	1.203	6.38	0.0	0.211	-0.210	-0.006	0.068	5863	0.178	-0.034	0.383
20	1.202	6.38	0.0	0.209	-0.202	-0.010	0.067	4977	0.151	-0.064	0.440
21	1.202	6.38	0.0	0.208	-0.201	-0.007	0.058	4257	0.129	-0.054	0.448
22	1.202	6.38	0.0	0.210	-0.205	-0.004	0.045	3613	0.110	-0.032	0.406
23	1.203	6.38	0.0	0.210	-0.202	-0.003	0.041	3073	0.093	-0.029	0.438
24	1.203	6.38	0.0	0.210	-0.201	-0.001	0.030	2567	0.078	-0.015	0.384
25	1.203	6.38	0.0	0.208	-0.195	-0.008	0.048	2183	0.066	-0.118	0.716
26	1.203	6.38	0.0	0.209	-0.199	-0.000	0.023	1680	0.051	-0.004	0.460
27	1.203	6.38	0.0	0.208	-0.196	0.000	0.020	1387	0.042	0.006	0.464
28	1.203	6.38	0.0	0.208	-0.197	0.002	0.012	853	0.026	0.062	0.450
29	1.202	6.38	0.0	0.206	-0.192	0.003	0.001	600	0.018	0.161	0.065
30	1.201	6.38	0.0	0.207	-0.191	0.001	0.008	300	0.009		

RUN	TST	P	TN	CONF	PAZL	Q	PT	P	TTF	TF
26	575	1	66	1	3.00	588	1412	531	92	-31

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	4.14	0.0	0.128	-0.088	0.001	0.015	63	0.002		
2	1.202	4.14	0.0	0.129	-0.092	-0.003	0.026	93	0.003		
3	1.202	4.14	0.0	0.127	-0.085	0.003	0.011	93	0.003		
4	1.202	4.14	0.0	0.130	-0.094	0.004	0.006	57	0.002		
5	1.202	4.14	0.0	0.127	-0.086	-0.002	0.019	97	0.003		
6	1.201	4.14	0.0	0.126	-0.083	-0.010	0.065	6430	0.196	-0.053	0.332
7	1.201	4.14	0.0	0.129	-0.089	-0.009	0.063	6423	0.195	-0.045	0.321
8	1.201	4.14	0.0	0.126	-0.081	-0.010	0.065	6383	0.194	-0.054	0.333
9	1.201	4.14	0.0	0.127	-0.083	-0.010	0.065	6403	0.195	-0.054	0.335
10	1.201	4.14	0.0	0.128	-0.085	-0.010	0.064	6397	0.195	-0.051	0.327
11	1.200	4.14	0.0	0.130	-0.095	-0.013	0.087	9603	0.292	-0.045	0.296
12	1.200	4.14	0.0	0.129	-0.091	-0.016	0.088	9763	0.297	-0.052	0.298
13	1.201	4.14	0.0	0.131	-0.098	-0.016	0.094	9837	0.299	-0.052	0.315
14	1.201	4.14	0.0	0.129	-0.090	-0.015	0.090	9837	0.299	-0.049	0.299
15	1.201	4.14	0.0	0.128	-0.089	-0.015	0.088	9823	0.299	-0.050	0.295
16	1.200	4.14	0.0	0.129	-0.097	-0.009	0.066	9407	0.286	-0.032	0.230
17	1.201	4.14	0.0	0.129	-0.093	-0.011	0.068	8107	0.247	-0.045	0.274
18	1.201	4.12	0.0	0.128	-0.092	-0.005	0.044	6980	0.212	-0.022	0.208
19	1.200	4.12	0.0	0.129	-0.092	-0.003	0.043	6003	0.183	-0.016	0.234
20	1.201	4.12	0.0	0.129	-0.091	-0.001	0.032	5147	0.157	-0.004	0.207
21	1.202	4.12	0.0	0.127	-0.085	-0.002	0.033	4337	0.132	-0.014	0.247
22	1.200	4.12	0.0	0.126	-0.082	0.000	0.021	3667	0.112	0.003	0.189
23	1.200	4.12	0.0	0.126	-0.080	0.000	0.014	3087	0.094	0.004	0.148
24	1.200	4.12	0.0	0.126	-0.083	-0.001	0.021	2570	0.078	-0.012	0.267
25	1.200	4.12	0.0	0.129	-0.090	-0.002	0.022	2070	0.063	-0.028	0.350
26	1.202	4.12	0.0	0.129	-0.091	0.000	0.020	1683	0.051	0.001	0.393
27	1.202	4.12	0.0	0.129	-0.090	0.005	0.007	1293	0.039	0.129	0.182

RUN	TST	P	TH	CONF	RN/L	Q	PT	P	TTF	TF
34	575	1	66	2	3.00	584	1406	581	90	-33

SEQ	MACH	ALPHA	BETA	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
3	1.199	10.73	0.0	0.405	-0.606	0.011	-0.020	3	0.000		
4	1.201	10.74	0.0	0.404	-0.591	0.006	-0.009	0	0.000		
5	1.202	10.73	0.0	0.404	-0.594	0.013	-0.026	0	0.000		
6	1.202	10.73	0.0	0.402	-0.591	0.010	-0.018	0	0.000		
7	1.201	10.72	0.0	0.404	-0.604	0.012	-0.023	0	0.000		
8	1.199	10.73	0.0	0.409	-0.618	-0.023	0.134	6477	0.197	-0.118	0.678
9	1.200	10.72	0.0	0.409	-0.623	-0.022	0.130	6453	0.197	-0.114	0.662
10	1.199	10.72	0.0	0.407	-0.615	-0.021	0.126	6443	0.196	-0.106	0.643
11	1.199	10.72	0.0	0.408	-0.618	-0.026	0.141	6460	0.197	-0.133	0.717
12	1.200	10.73	0.0	0.407	-0.613	-0.022	0.129	6467	0.197	-0.111	0.655
13	1.200	10.71	0.0	0.413	-0.652	-0.040	0.210	9673	0.294	-0.136	0.714
14	1.200	10.72	0.0	0.413	-0.639	-0.040	0.206	9690	0.295	-0.134	0.704
15	1.200	10.72	0.0	0.414	-0.647	-0.037	0.201	9700	0.295	-0.125	0.681
16	1.200	10.72	0.0	0.412	-0.640	-0.040	0.208	9690	0.295	-0.135	0.706
17	1.200	10.72	0.0	0.412	-0.643	-0.038	0.203	9673	0.294	-0.128	0.690
18	1.201	10.74	0.0	0.414	-0.640	-0.034	0.189	9587	0.291	-0.117	0.649
19	1.202	10.74	0.0	0.413	-0.635	-0.034	0.179	8633	0.262	-0.131	0.683
20	1.202	10.74	0.0	0.409	-0.621	-0.027	0.151	7723	0.234	-0.115	0.645
21	1.201	10.74	0.0	0.409	-0.618	-0.022	0.133	6880	0.209	-0.107	0.635
22	1.201	10.74	0.0	0.408	-0.620	-0.019	0.117	6113	0.186	-0.103	0.631
23	1.200	10.74	0.0	0.405	-0.604	-0.018	0.110	5413	0.164	-0.110	0.668
24	1.200	10.74	0.0	0.405	-0.601	-0.013	0.088	4727	0.144	-0.092	0.611
25	1.200	10.75	0.0	0.408	-0.611	-0.010	0.076	4210	0.128	-0.080	0.597
26	1.200	10.75	0.0	0.406	-0.604	-0.009	0.066	3727	0.113	-0.076	0.580
27	1.200	10.75	0.0	0.407	-0.609	-0.005	0.053	3253	0.099	-0.048	0.533
28	1.200	10.75	0.0	0.406	-0.603	-0.006	0.048	2873	0.087	-0.069	0.554
29	1.200	10.74	0.0	0.405	-0.605	0.001	0.032	2513	0.076	0.008	0.414
30	1.200	10.74	0.0	0.406	-0.603	-0.001	0.033	2183	0.066	-0.015	0.493
31	1.200	10.74	0.0	0.405	-0.604	-0.000	0.027	1883	0.057	-0.007	0.464
32	1.200	10.74	0.0	0.402	-0.596	0.004	0.017	1607	0.049	0.072	0.356
33	1.199	10.74	0.0	0.406	-0.608	0.001	0.017	1307	0.040	0.032	0.434
34	1.200	10.74	0.0	0.406	-0.609	0.011	-0.013	680	0.021	0.533	-0.639
35	1.200	10.74	0.0	0.402	-0.589	0.006	-0.005	413	0.013	0.507	-0.366

RUN	TST	P	TN	CODE	PNZL	Q	PI	P	TTF	TF
35	575	1	66	5	3.00	593	1426	596	96	-23

SEQ	MACH	ALPHA	CLNF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	8.58	0.0	0.296	-0.346	0.011	-0.025	0	0.000		
2	1.202	8.58	0.0	0.296	-0.343	0.014	-0.027	0	0.000		
3	1.202	8.58	0.0	0.297	-0.347	0.005	-0.010	0	0.000		
4	1.202	8.58	0.0	0.297	-0.347	0.006	-0.011	0	0.000		
5	1.203	8.58	0.0	0.297	-0.346	0.012	-0.024	0	0.000		
6	1.200	8.58	0.0	0.297	-0.356	-0.019	0.110	6467	0.196	-0.097	0.562
7	1.200	8.57	0.0	0.296	-0.353	-0.017	0.107	6470	0.196	-0.089	0.546
8	1.200	8.58	0.0	0.299	-0.360	-0.016	0.106	6467	0.196	-0.084	0.538
9	1.200	8.57	0.0	0.298	-0.360	-0.020	0.114	6470	0.196	-0.103	0.581
10	1.200	8.57	0.0	0.297	-0.360	-0.016	0.104	6470	0.196	-0.081	0.533
11	1.200	8.59	0.0	0.298	-0.359	-0.015	0.103	6470	0.196	-0.077	0.524
12	1.200	8.57	0.0	0.303	-0.381	-0.029	0.165	9700	0.294	-0.099	0.560
13	1.200	8.57	0.0	0.302	-0.375	-0.033	0.174	9673	0.293	-0.114	0.595
14	1.200	8.57	0.0	0.303	-0.386	-0.030	0.166	9667	0.293	-0.103	0.574
15	1.199	8.57	0.0	0.303	-0.383	-0.032	0.171	9650	0.293	-0.109	0.586
16	1.199	8.57	0.0	0.304	-0.388	-0.029	0.165	9650	0.292	-0.098	0.563
17	1.200	8.58	0.0	0.303	-0.384	-0.027	0.157	9607	0.291	-0.094	0.540
18	1.200	8.58	0.0	0.301	-0.377	-0.026	0.141	8487	0.257	-0.099	0.550
19	1.201	8.58	0.0	0.301	-0.372	-0.019	0.114	7363	0.223	-0.083	0.512
20	1.202	8.59	0.0	0.303	-0.373	-0.019	0.109	6270	0.190	-0.101	0.576
21	1.202	8.58	0.0	0.298	-0.359	-0.008	0.074	5383	0.163	-0.052	0.457
22	1.202	8.59	0.0	0.298	-0.355	-0.007	0.064	4607	0.139	-0.049	0.462
23	1.202	8.59	0.0	0.297	-0.349	-0.006	0.056	3863	0.117	-0.055	0.476
24	1.202	8.59	0.0	0.297	-0.348	-0.000	0.032	2957	0.089	-0.002	0.363
25	1.202	8.59	0.0	0.296	-0.346	-0.001	0.029	2447	0.074	-0.014	0.393
26	1.202	8.59	0.0	0.297	-0.349	-0.003	0.026	2030	0.061	-0.044	0.462
27	1.201	8.59	0.0	0.296	-0.347	0.002	0.014	1710	0.052	0.038	0.270
28	1.201	8.59	0.0	0.296	-0.347	0.003	0.007	1320	0.040	0.082	0.173
29	1.201	8.59	0.0	0.297	-0.349	0.004	0.003	967	0.029	0.122	0.099
30	1.202	8.58	0.0	0.295	-0.343	0.010	-0.015	640	0.019	0.537	-0.809
31	1.202	8.59	0.0	0.296	-0.343	0.007	-0.009	423	0.013	0.530	-0.712

RUN	TST	P	TF	CONF	MACH	Q	PT	P	TTF	TF
36	575	1	66	2	3.01	599	1439	592	99	-26

SEC	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	6.33	0.0	0.206	-0.188	0.005	0.001	0	0.000		
2	1.200	6.37	0.0	0.204	-0.184	0.004	-0.004	0	0.000		
3	1.199	6.38	0.0	0.206	-0.188	0.004	-0.000	0	0.000		
4	1.200	6.38	0.0	0.206	-0.189	0.003	0.004	0	0.000		
5	1.201	6.39	0.0	0.206	-0.188	-0.000	0.010	0	0.000		
6	1.201	6.38	0.0	0.206	-0.188	0.003	0.005	0	0.000		
7	1.201	6.38	0.0	0.208	-0.196	-0.017	0.103	6463	0.195	-0.088	0.526
8	1.201	6.38	0.0	0.207	-0.190	-0.013	0.090	6450	0.195	-0.069	0.462
9	1.201	6.38	0.0	0.207	-0.191	-0.018	0.100	6463	0.195	-0.093	0.510
10	1.201	6.39	0.0	0.206	-0.189	-0.014	0.091	6453	0.195	-0.071	0.467
11	1.201	6.38	0.0	0.207	-0.193	-0.017	0.098	6460	0.195	-0.088	0.503
12	1.200	6.38	0.0	0.210	-0.205	-0.022	0.129	9703	0.294	-0.075	0.441
13	1.200	6.38	0.0	0.209	-0.204	-0.023	0.128	9680	0.293	-0.080	0.436
14	1.200	6.38	0.0	0.209	-0.203	-0.025	0.135	9673	0.293	-0.086	0.463
15	1.200	6.38	0.0	0.209	-0.204	-0.024	0.130	9670	0.293	-0.082	0.443
16	1.199	6.37	0.0	0.206	-0.196	-0.022	0.124	9670	0.293	-0.074	0.423
17	1.199	6.37	0.0	0.208	-0.204	-0.026	0.135	9667	0.293	-0.089	0.460
18	1.199	6.38	0.0	0.209	-0.203	-0.021	0.125	✓ 9623	0.291	-0.073	0.429
19	1.200	6.37	0.0	0.209	-0.208	-0.017	0.105	8543	0.258	-0.066	0.407
20	1.201	6.39	0.0	0.209	-0.203	-0.017	0.101	7070	0.214	-0.078	0.471
21	1.201	6.38	0.0	0.209	-0.200	-0.012	0.078	6080	0.184	-0.066	0.426
22	1.201	6.37	0.0	0.205	-0.190	-0.008	0.062	5267	0.159	-0.048	0.390
23	1.202	6.38	0.0	0.205	-0.189	-0.009	0.064	4647	0.140	-0.063	0.455
24	1.202	6.38	0.0	0.205	-0.186	-0.005	0.050	4050	0.122	-0.040	0.407
25	1.201	6.38	0.0	0.206	-0.189	-0.007	0.047	3427	0.104	-0.064	0.450
26	1.201	6.38	0.0	0.204	-0.183	-0.011	0.054	2890	0.087	-0.121	0.613
27	1.201	6.38	0.0	0.205	-0.187	-0.001	0.025	2333	0.071	-0.013	0.358
28	1.202	6.38	0.0	0.206	-0.187	-0.002	0.029	1973	0.060	-0.033	0.492
29	1.201	6.38	0.0	0.205	-0.185	0.001	0.017	1560	0.047	0.030	0.352
30	1.202	6.38	0.0	0.205	-0.188	0.000	0.016	1107	0.033	0.005	0.485
31	1.202	6.38	0.0	0.204	-0.182	0.000	0.015	813	0.025	0.017	0.623
32	1.202	6.38	0.0	0.205	-0.186	0.002	0.008	533	0.016	0.150	0.519
				0.206	-0.187	0.000	0.011	343	0.010	0.037	1.069

RUN	TST	P	TR	CONF	PN/A	Q	PT	P	TTF	TT
37	575	1	66	2	3.01	599	1433	591	100	-26

SEQ	MACH	ALPHA	GIMP	CD	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.203	4.10	0.0	0.127	-0.099	0.003	0.012	0	0.000		
2	1.203	4.11	0.0	0.126	-0.087	-0.005	0.032	0	0.000		
3	1.203	4.10	0.0	0.125	-0.083	-0.004	0.029	0	0.000		
4	1.203	4.10	0.0	0.125	-0.080	-0.007	0.032	0	0.000		
5	1.201	4.10	0.0	0.124	-0.077	0.000	0.012	0	0.000		
6	1.202	4.11	0.0	0.126	-0.084	-0.008	0.063	6470	0.196	-0.041	0.320
7	1.201	4.11	0.0	0.125	-0.079	-0.013	0.074	6467	0.196	-0.068	0.377
8	1.201	4.11	0.0	0.128	-0.088	-0.009	0.064	6467	0.196	-0.047	0.329
9	1.201	4.10	0.0	0.127	-0.086	-0.010	0.066	6460	0.195	-0.050	0.337
10	1.201	4.10	0.0	0.125	-0.082	-0.009	0.063	6447	0.195	-0.046	0.324
11	1.201	4.11	0.0	0.128	-0.092	-0.013	0.088	9687	0.293	-0.044	0.300
12	1.201	4.11	0.0	0.128	-0.089	-0.017	0.091	9677	0.293	-0.056	0.310
13	1.201	4.11	0.0	0.128	-0.094	-0.018	0.096	9677	0.293	-0.063	0.336
14	1.201	4.10	0.0	0.126	-0.086	-0.015	0.089	9673	0.293	-0.051	0.303
15	1.200	4.10	0.0	0.127	-0.085	-0.019	0.100	9677	0.293	-0.064	0.341
16	1.200	4.11	0.0	0.126	-0.085	-0.015	0.089	9667	0.293	-0.051	0.303
17	1.201	4.10	0.0	0.127	-0.089	-0.017	0.096 ✓	✓ 9630	0.291	-0.059	0.331
18	1.201	4.10	0.0	0.129	-0.095	-0.011	0.073	8513	0.258	-0.042	0.282
19	1.201	4.10	0.0	0.126	-0.087	-0.015	0.079	7350	0.222	-0.069	0.353
20	1.201	4.10	0.0	0.126	-0.087	-0.008	0.059	6460	0.195	-0.042	0.303
21	1.201	4.10	0.0	0.126	-0.086	-0.006	0.045	5473	0.166	-0.034	0.273
22	1.201	4.11	0.0	0.124	-0.078	-0.004	0.040	4697	0.142	-0.027	0.279
23	1.201	4.10	0.0	0.126	-0.084	-0.006	0.041	4000	0.121	-0.047	0.340
24	1.201	4.10	0.0	0.124	-0.078	-0.007	0.043	3420	0.103	-0.069	0.420
25	1.201	4.10	0.0	0.124	-0.079	-0.004	0.036	2720	0.082	-0.050	0.434
26	1.201	4.10	0.0	0.125	-0.081	-0.010	0.045	2290	0.069	-0.137	0.645
27	1.201	4.10	0.0	0.125	-0.078	-0.001	0.018	1920	0.058	-0.012	0.318
28	1.200	4.11	0.0	0.125	-0.080	-0.003	0.020	1543	0.047	-0.058	0.430
29	1.199	4.10	0.0	0.126	-0.080	-0.014	0.022	1150	0.035	-0.115	0.628
30	1.200	4.11	0.0	0.126	-0.082	-0.005	0.028	830	0.025	-0.203	1.109
31	1.200	4.11	0.0	0.125	-0.080	0.001	0.008	580	0.019	0.074	0.494
32	1.200	4.10	0.0	0.123	-0.074	-0.001	0.014	343	0.010	-0.133	1.350

RUN	TST	P	TH	CCNF	PN/P	Q	PT	P	TTF	TF
38	575	1	66	2	1.01	599	1449	593	99	-26

SEQ	MACH	ALPHA	CCNF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	1.202	1.91	0.0	0.055	-0.009	-0.006	0.029	0	0.000		
2	1.201	1.90	0.0	0.054	-0.009	-0.004	0.022	0	0.000		
3	1.201	1.90	0.0	0.053	-0.003	-0.002	0.018	0	0.000		
4	1.200	1.91	0.0	0.054	-0.006	-0.001	0.014	0	0.000		
5	1.200	1.91	0.0	0.055	-0.010	0.006	-0.004	0	0.000		
6	1.201	1.91	0.0	0.054	-0.006	-0.008	0.044	6463	0.196	-0.042	0.226
7	1.201	1.91	0.0	0.055	-0.012	-0.001	0.025	6467	0.196	-0.005	0.130
8	1.201	1.90	0.0	0.054	-0.010	-0.005	0.038	6467	0.196	-0.027	0.194
9	1.201	1.90	0.0	0.055	-0.011	-0.000	0.027	6453	0.195	-0.000	0.140
10	1.201	1.90	0.0	0.054	-0.009	-0.001	0.025	6463	0.196	-0.006	0.129
11	1.201	1.90	0.0	0.056	-0.012	-0.010	0.059	9687	0.293	-0.034	0.201
12	1.201	1.90	0.0	0.054	-0.011	-0.015	0.068	9670	0.293	-0.051	0.232
13	1.201	1.90	0.0	0.056	-0.018	-0.004	0.042	9670	0.293	-0.012	0.143
14	1.201	1.90	0.0	0.054	-0.009	-0.008	0.051	9690	0.293	-0.027	0.176
15	1.201	1.90	0.0	0.054	-0.011	-0.004	0.044	9677	0.293	-0.014	0.150
16	1.202	1.90	0.0	0.056	-0.016	-0.012	0.060	9640	0.292	-0.040	0.207
17	1.202	1.90	0.0	0.056	-0.017	-0.008	0.045	8553	0.259	-0.031	0.176
18	1.202	1.91	0.0	0.054	-0.010	-0.008	0.047	7410	0.224	-0.036	0.210
19	1.201	1.90	0.0	0.055	-0.014	-0.008	0.044	6160	0.186	-0.041	0.234
20	1.201	1.91	0.0	0.054	-0.008	-0.002	0.028	5240	0.158	-0.012	0.177
21	1.202	1.90	0.0	0.054	-0.009	-0.006	0.035	4373	0.132	-0.044	0.262
22	1.202	1.91	0.0	0.054	-0.009	0.001	0.018	3663	0.111	0.011	0.158
23	1.202	1.90	0.0	0.054	-0.010	0.000	0.019	3083	0.093	0.005	0.200
24	1.202	1.91	0.0	0.055	-0.011	-0.007	0.034	2473	0.075	-0.096	0.455
25	1.202	1.90	0.0	0.054	-0.009	-0.001	0.020	2067	0.062	-0.018	0.323
26	1.202	1.91	0.0	0.055	-0.009	0.004	0.005	1653	0.050	0.089	0.093
27	1.202	1.91	0.0	0.055	-0.010	-0.006	0.029	1293	0.039	-0.145	0.752
28	1.202	1.91	0.0	0.056	-0.016	-0.015	0.052	997	0.030	-0.502	1.741
29	1.201	1.90	0.0	0.053	-0.007	-0.006	0.026	690	0.021	-0.281	1.239
30	1.200	1.90	0.0	0.053	-0.006	0.000	0.009	440	0.013	0.028	0.688

PLN	TST	P	TN	CONF	RN/L	Q	PT	P	ITF	TF
39	575	1	66	2	3.05	473	1604	1050	92	30

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYM	RPM	VP	CNP	CMP
1	0.802	10.66	0.0	0.287	-0.209	-0.000	-0.001	0	0.000		
2	0.803	10.66	0.0	0.286	-0.202	0.002	-0.006	0	0.000		
3	0.802	10.66	0.0	0.288	-0.211	-0.000	-0.001	0	0.000		
4	0.795	10.65	0.0	0.285	-0.208	0.002	-0.004	0	0.000		
5	0.794	10.66	0.0	0.286	-0.204	0.000	0.002	0	0.000		
6	0.801	10.65	0.0	0.290	-0.229	-0.031	0.134	4600	0.196	-0.158	0.684
7	0.801	10.66	0.0	0.292	-0.231	-0.028	0.128	4607	0.197	-0.143	0.650
8	0.804	10.66	0.0	0.293	-0.233	-0.029	0.131	4600	0.196	-0.146	0.668
9	0.802	10.66	0.0	0.294	-0.237	-0.030	0.133	4580	0.195	-0.153	0.679
10	0.800	10.65	0.0	0.290	-0.228	-0.028	0.129	4577	0.196	-0.144	0.657
11	0.802	10.66	0.0	0.298	-0.261	-0.042	0.185	6860	0.293	-0.143	0.632
12	0.803	10.66	0.0	0.298	-0.257	-0.038	0.176	6833	0.292	-0.128	0.603
13	0.801	10.65	0.0	0.297	-0.259	-0.042	0.190	6837	0.292	-0.145	0.649
14	0.802	10.66	0.0	0.298	-0.257	-0.043	0.188	6860	0.293	-0.147	0.643
15	0.802	10.65	0.0	0.296	-0.255	-0.044	0.191	6857	0.293	-0.149	0.654
16	0.800	10.65	0.0	0.295	-0.256	-0.042	0.185 ✓	✓6820	0.292	-0.145	0.633
17	0.801	10.66	0.0	0.297	-0.253	-0.034	0.156	5887	0.251	-0.137	0.622
18	0.802	10.65	0.0	0.291	-0.234	-0.030	0.133	4807	0.205	-0.148	0.651
19	0.802	10.66	0.0	0.291	-0.231	-0.023	0.108	4080	0.174	-0.133	0.619
20	0.802	10.65	0.0	0.288	-0.219	-0.016	0.083	3410	0.146	-0.113	0.568
21	0.802	10.66	0.0	0.289	-0.215	-0.014	0.072	2820	0.120	-0.118	0.597
22	0.802	10.66	0.0	0.288	-0.214	-0.015	0.063	2307	0.098	-0.150	0.643
23	0.804	10.66	0.0	0.288	-0.212	-0.010	0.041	1530	0.065	-0.155	0.630
24	0.803	10.66	0.0	0.289	-0.215	-0.003	0.018	1013	0.043	-0.065	0.422
25	0.802	10.66	0.0	0.287	-0.208	-0.002	0.015	723	0.031	-0.080	0.476
26	0.800	10.66	0.0	0.285	-0.205	-0.001	0.007	453	0.019	-0.058	0.386
27	0.802	10.66	0.0	0.288	-0.212	0.001	0.001	263	0.011	0.086	0.133

RUN	TST	P	TN	CONF	PN/L	Q	PT	P	TTF	TF
40	575	1	66	2	1.05	471	1603	1052	92	29

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.800	8.50	0.0	0.214	-0.096	-0.003	0.011	80	0.003		
2	0.798	8.49	0.0	0.212	-0.095	-0.004	0.015	0	0.000		
3	0.793	8.49	0.0	0.212	-0.096	0.001	0.003	0	0.000		
4	0.798	8.50	0.0	0.213	-0.096	0.001	0.003	0	0.000		
5	0.799	8.49	0.0	0.213	-0.099	-0.000	0.005	0	0.000		
6	0.803	8.50	0.0	0.216	-0.107	-0.025	0.116	4580	0.195	-0.131	0.596
7	0.805	8.50	0.0	0.217	-0.106	-0.026	0.117	4593	0.196	-0.131	0.596
8	0.804	8.50	0.0	0.215	-0.104	-0.024	0.113	4593	0.196	-0.123	0.579
9	0.798	8.49	0.0	0.216	-0.116	-0.026	0.119	4593	0.197	-0.127	0.605
10	0.796	8.49	0.0	0.216	-0.110	-0.027	0.121	4593	0.198	-0.134	0.610
11	0.803	8.49	0.0	0.221	-0.135	-0.035	0.164	6830	0.291	-0.121	0.562
12	0.801	8.49	0.0	0.219	-0.125	-0.039	0.173	6830	0.292	-0.135	0.594
13	0.799	8.49	0.0	0.220	-0.130	-0.036	0.168	6847	0.293	-0.124	0.571
14	0.798	8.49	0.0	0.219	-0.125	-0.038	0.168	6853	0.294	-0.128	0.571
15	0.800	8.49	0.0	0.221	-0.133	-0.032	0.156	6860	0.294	-0.108	0.532
16	0.799	8.49	0.0	0.219	-0.126	-0.034	0.158	6827	0.293	-0.116	0.539
17	0.796	8.49	0.0	0.221	-0.136	-0.030	0.136	5803	0.249	-0.121	0.546
18	0.797	8.49	0.0	0.222	-0.132	-0.021	0.107	4877	0.210	-0.101	0.510
19	0.801	8.50	0.0	0.217	-0.111	-0.020	0.097	4067	0.174	-0.118	0.561
20	0.803	8.50	0.0	0.216	-0.108	-0.014	0.074	3360	0.143	-0.094	0.513
21	0.800	8.50	0.0	0.216	-0.110	-0.013	0.063	2773	0.119	-0.107	0.529
22	0.799	8.50	0.0	0.216	-0.109	-0.012	0.057	2267	0.097	-0.125	0.582
23	0.801	8.51	0.0	0.213	-0.109	-0.012	0.050	1803	0.077	-0.150	0.650
24	0.801	8.51	0.0	0.215	-0.102	-0.008	0.038	1447	0.062	-0.132	0.615
25	0.802	8.52	0.0	0.215	-0.095	-0.003	0.020	1107	0.047	-0.066	0.419
26	0.800	8.51	0.0	0.215	-0.103	-0.009	0.027	810	0.035	-0.216	0.768
27	0.797	8.51	0.0	0.212	-0.093	-0.001	0.010	567	0.024	-0.053	0.407
28	0.802	8.51	0.0	0.213	-0.095	-0.002	0.010	280	0.012	-0.159	0.851

RUN	TST	P	TN	CONF	RNYL	Q	PT	P	TTF	TF
41	575	1	66	2	3.06	474	1604	1048	90	28

SEQ	MACH	ALPHA	CONF	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.804	6.34	0.0	0.154	-0.051	-0.004	0.005	0	0.000		
2	0.804	6.34	0.0	0.152	-0.046	-0.005	0.009	0	0.000		
3	0.804	6.34	0.0	0.154	-0.047	-0.002	0.004	0	0.000		
4	0.804	6.34	0.0	0.152	-0.042	0.002	-0.007	0	0.000		
5	0.804	6.34	0.0	0.153	-0.045	-0.000	-0.001	0	0.000		
6	0.804	6.34	0.0	0.152	-0.043	-0.016	0.077	4573	0.195	-0.085	0.392
7	0.805	6.34	0.0	0.153	-0.041	-0.017	0.076	4580	0.195	-0.089	0.392
8	0.804	6.34	0.0	0.152	-0.042	-0.020	0.086	4593	0.196	-0.102	0.439
9	0.802	6.34	0.0	0.152	-0.045	-0.017	0.078	4600	0.197	-0.086	0.397
10	0.800	6.34	0.0	0.154	-0.048	-0.015	0.072	4567	0.196	-0.077	0.370
11	0.801	6.34	0.0	0.152	-0.042	-0.019	0.084	4567	0.196	-0.099	0.429
12	0.801	6.34	0.0	0.155	-0.060	-0.030	0.128	6847	0.293	-0.103	0.437
13	0.800	6.34	0.0	0.154	-0.053	-0.029	0.127	6817	0.292	-0.099	0.436
14	0.802	6.34	0.0	0.155	-0.052	-0.028	0.122	6803	0.291	-0.096	0.420
15	0.805	6.34	0.0	0.155	-0.053	-0.032	0.131	6837	0.292	-0.109	0.449
16	0.803	6.33	0.0	0.152	-0.050	-0.029	0.125	6833	0.292	-0.098	0.429
17	0.799	6.34	0.0	0.156	-0.064	-0.023	0.110	6770	0.291	-0.080	0.380
18	0.802	6.34	0.0	0.157	-0.064	-0.019	0.089	5803	0.248	-0.078	0.359
19	0.804	6.35	0.0	0.157	-0.062	-0.018	0.080	4880	0.208	-0.086	0.394
20	0.800	6.34	0.0	0.154	-0.054	-0.014	0.062	4030	0.173	-0.079	0.360
21	0.799	6.34	0.0	0.152	-0.046	-0.013	0.055	3373	0.145	-0.092	0.379
22	0.800	6.34	0.0	0.151	-0.043	-0.010	0.042	2790	0.120	-0.086	0.354
23	0.802	6.34	0.0	0.153	-0.049	-0.004	0.023	2223	0.095	-0.042	0.241
24	0.803	6.34	0.0	0.154	-0.051	-0.005	0.023	1777	0.076	-0.067	0.307
25	0.803	6.34	0.0	0.152	-0.049	-0.007	0.020	1393	0.060	-0.111	0.335
26	0.802	6.34	0.0	0.154	-0.052	-0.005	0.017	1040	0.044	-0.121	0.383
27	0.804	6.34	0.0	0.154	-0.051	-0.004	0.013	727	0.031	-0.133	0.426
28	0.802	6.34	0.0	0.154	-0.053	-0.005	0.012	483	0.021	-0.221	0.588

RUN	TST	C	TM	CONF	PM/C	Q	PT	P	TTF	TF
42	575	1	66	3	3.07	471	1604	1052	89	27

SEQ	MACH	ALPHA	CONF	CN	CM	CY	CYN	RPM	VP	CNP	CMP
1	0.799	4.17	0.0	0.102	-0.030	-0.003	0.008	0	0.000		
2	0.803	4.17	0.0	0.100	-0.025	-0.002	0.005	0	0.000		
3	0.805	4.17	0.0	0.099	-0.024	-0.000	-0.000	0	0.000		
4	0.799	4.17	0.0	0.100	-0.027	-0.003	0.006	0	0.000		
5	0.799	4.17	0.0	0.099	-0.024	-0.001	0.003	0	0.000		
6	0.800	4.17	0.0	0.098	-0.019	-0.012	0.048	4587	0.197	-0.059	0.245
7	0.800	4.17	0.0	0.099	-0.021	-0.012	0.050	4593	0.197	-0.061	0.253
8	0.801	4.17	0.0	0.097	-0.013	-0.012	0.049	4587	0.197	-0.063	0.251
9	0.803	4.17	0.0	0.103	-0.024	-0.010	0.044	4580	0.196	-0.050	0.224
10	0.802	4.17	0.0	0.099	-0.022	-0.009	0.042	4577	0.196	-0.047	0.213
11	0.802	4.17	0.0	0.100	-0.025	-0.020	0.080	6830	0.292	-0.070	0.275
12	0.802	4.17	0.0	0.100	-0.025	-0.017	0.071	6847	0.293	-0.057	0.243
13	0.802	4.17	0.0	0.099	-0.021	-0.014	0.067	6853	0.293	-0.049	0.227
14	0.805	4.17	0.0	0.097	-0.015	-0.017	0.073	6853	0.292	-0.059	0.251
15	0.810	4.17	0.0	0.099	-0.020	-0.015	0.068	6853	0.291	-0.053	0.235
16	0.810	4.17	0.0	0.099	-0.020	-0.019	0.076	6843	0.290	-0.064	0.263
17	0.803	4.17	0.0	0.098	-0.018	-0.019	0.075	6810	0.290	-0.065	0.257
18	0.807	4.17	0.0	0.099	-0.024	-0.014	0.061	5780	0.246	-0.056	0.205
19	0.808	4.17	0.0	0.099	-0.023	-0.011	0.040	4807	0.204	-0.052	0.198
20	0.809	4.17	0.0	0.099	-0.024	-0.009	0.036	3997	0.170	-0.053	0.211
21	0.809	4.17	0.0	0.100	-0.027	-0.006	0.027	3317	0.141	-0.045	0.189
22	0.806	4.17	0.0	0.098	-0.029	-0.009	0.032	2700	0.115	-0.075	0.274
23	0.803	4.17	0.0	0.100	-0.026	-0.009	0.027	2150	0.092	-0.095	0.299
24	0.803	4.17	0.0	0.101	-0.029	-0.004	0.015	1703	0.073	-0.052	0.208
25	0.804	4.17	0.0	0.101	-0.031	-0.004	0.015	1320	0.056	-0.074	0.264
26	0.802	4.17	0.0	0.100	-0.029	-0.003	0.012	997	0.043	-0.078	0.287
27	0.798	4.17	0.0	0.099	-0.025	-0.004	0.013	733	0.032	-0.130	0.408
28	0.798	4.17	0.0	0.100	-0.029	-0.009	0.023	507	0.022	-0.413	1.078

RUN	TST	P	TN	CONF	MACH	Q	PI	P	TTF	TI
43	575	1	66	2	3.07	472	1604	1050	88	26

SEQ	MACH	ALPHA	CCLP	CN	CLM	CY	CYN	RPM	VR	CNP	CMP
1	0.802	1.97	0.0	0.046	-0.009	-0.002	0.006	0	0.000		
2	0.804	1.97	0.0	0.045	-0.004	-0.007	0.019	0	0.000		
3	0.804	1.97	0.0	0.044	-0.003	-0.004	0.010	0	0.000		
4	0.802	1.97	0.0	0.046	-0.009	-0.002	0.007	0	0.000		
5	0.800	1.97	0.0	0.046	-0.009	-0.003	0.008	0	0.000		
6	0.805	1.97	0.0	0.044	-0.004	-0.006	0.023	4593	0.196	-0.030	0.116
7	0.805	1.97	0.0	0.046	-0.009	-0.008	0.027	4577	0.195	-0.040	0.139
8	0.804	1.97	0.0	0.047	-0.009	-0.007	0.025	4587	0.196	-0.037	0.126
9	0.799	1.97	0.0	0.046	-0.010	-0.005	0.019	4593	0.197	-0.023	0.096
10	0.800	1.98	0.0	0.047	-0.009	-0.007	0.025	4593	0.197	-0.037	0.125
11	0.799	1.97	0.0	0.048	-0.013	-0.009	0.030	6847	0.294	-0.031	0.122
12	0.799	1.98	0.0	0.047	-0.007	-0.008	0.034	6837	0.294	-0.026	0.117
13	0.799	1.97	0.0	0.047	-0.010	-0.009	0.037	6857	0.295	-0.032	0.125
14	0.801	1.97	0.0	0.047	-0.012	-0.009	0.036	6830	0.293	-0.031	0.124
15	0.802	1.97	0.0	0.047	-0.013	-0.011	0.040	6843	0.293	-0.038	0.137
16	0.802	1.97	0.0	0.046	-0.009	-0.007	0.031	6790	0.291	-0.026	0.107
17	0.800	1.97	0.0	0.047	-0.011	-0.007	0.024	5730	0.246	-0.029	0.100
18	0.800	1.97	0.0	0.047	-0.011	-0.008	0.024	4807	0.206	-0.037	0.116
19	0.802	1.97	0.0	0.046	-0.006	-0.004	0.014	4007	0.172	-0.023	0.079
20	0.804	1.97	0.0	0.044	-0.001	-0.002	0.010	3313	0.142	-0.016	0.069
21	0.803	1.97	0.0	0.045	-0.005	-0.001	0.006	2733	0.117	-0.012	0.050
22	0.801	1.97	0.0	0.046	-0.009	-0.002	0.007	2233	0.096	-0.017	0.071
23	0.801	1.97	0.0	0.046	-0.009	-0.003	0.009	1770	0.076	-0.043	0.116
24	0.797	1.98	0.0	0.049	-0.015	-0.003	0.009	1367	0.059	-0.057	0.145
25	0.795	1.98	0.0	0.046	-0.006	-0.004	0.009	1053	0.045	-0.080	0.195
26	0.796	1.98	0.0	0.047	-0.010	-0.008	0.019	777	0.033	-0.242	0.581
27	0.798	1.98	0.0	0.046	-0.007	-0.003	0.006	543	0.023	-0.124	0.333
28	0.799	1.98	0.0	0.048	-0.015	-0.005	0.011	370	0.016	-0.287	0.693

Appendix 2

Tabulation of Laser Velocimeter Data

Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Profiles
0.8	0	BLUNT	0	4.50-5.75	4
0.8	0	BLUNT	6950	4.50-5.75	4
0.8	10	BLUNT	0	5.00	[illegible]
0.8	10	BLUNT	0	5.50	[illegible]
0.8	10	BLUNT	6950	5.00	[illegible]
0.8	10	BLUNT	6950	5.50	[illegible]
0.8	20	BLUNT	0	5.00	[illegible]
1.2	0	BLUNT	0	4.50-5.75	[illegible]
1.2	0	BLUNT	9830	4.50-5.75	[illegible]
1.2	0	SHARP	0	4.50-5.50	[illegible]
1.2	0	SHARP	9830	5.00-5.50	[illegible]
1.2	10	BLUNT	0	5.00	[illegible]
1.2	10	BLUNT	0	5.50	[illegible]
1.2	10	BLUNT	9830	5.00	[illegible]
1.2	10	BLUNT	9830	5.50	[illegible]
1.2	10	SHARP	0	5.00	[illegible]
1.2	10	SHARP	[illegible]	5.50	[illegible]
1.2	10	SHARP	9830	5.00	11
1.2	10	SHARP	9830	5.50	[illegible]
1.2	20	BLUNT	0	5.00	12
1.2	20	SHARP	0	5.00	8

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Roll (deg)	Scan
9	0.8	0	BLUNT	0	4.50	0	Y
1	0.8	0	BLUNT	0	5.00	0	Y
3	0.8	0	BLUNT	0	5.50	0	Y
5	0.8	0	BLUNT	0	5.75	0	Y

[illegible]	M [illegible]	[illegible]	[illegible]
[illegible]	X [illegible]	α	[illegible]
SIM : [illegible]	Z [illegible]	δ	[illegible]

	VELOCITY			RMS			SHEAR STRESS		
Y(cm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0065	0.8[illegible]	-0.015	-0.0265	0.0762	0.0442	0.1466	-0.9753	0.3305	-0.9581
0.0059	0.8534	-0.0091	-0.0234	0.0794	0.0393	0.1302	-0.8754	0.3719	-2.5795
0.0082	0.8665	-0.0084	-0.0197	0.0749	0.0407	0.1726	-0.8541	0.2230	-2.5626
0.0106	0.8995	-0.0065	-0.0075	0.0675	0.0407	0.1709	-0.6045	0.3738	-3.3373
0.0141	0.9284	-0.0038	-0.0145	0.0597	0.0406	0.1387	-0.4313	0.7649	-2.2865
0.0188	0.9514	-0.0062	-0.0112	0.0582	0.0360	0.1440	-0.5527	0.2923	-2.5385
0.0235	0.9851	-0.0024	-0.0141	0.0489	0.0370	0.1286	-0.2676	0.1276	-2.4341
0.0294	1.0043	0.0013	-0.0163	0.0400	0.0345	0.1189	-0.2733	-0.1807	-1.9283
0.0353	1.0188	0.0040	-0.0079	0.0273	0.0295	0.1215	-0.0648	0.1995	-2.3878
0.0471	1.0270	0.0064	0.0054	0.0258	0.0264	0.1184	0.0113	-0.1271	-2.4602
0.0706	1.0312	0.0047	0.0060	0.0254	0.0249	0.1182	-0.0205	0.1500	-2.4504
0.1176	1.0298	0.0015	0.0089	0.0266	0.0263	0.1266	-0.0039	0.0782	-2.7862

RUN #: 001	M: 2.800	U∞ 263.8 m/s
NASA REPRINT	X: 5.000 cal	α - °
RUN : 0003	Z: 0.600 cal	δ - °

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0035	0.8808	-0.0255	-0.0388	0.0574	0.0307	0.1376	-0.7515	0.6336	-2.4987
0.0047	0.9213	-0.0276	-0.0266	0.0618	0.0354	0.1321	-0.8289	0.5492	-0.9606
0.0071	0.9521	-0.0331	-0.0191	0.0598	0.0408	0.1458	-0.6944	0.6009	-1.2385
0.0094	0.9617	-0.0319	-0.0077	0.0588	0.0397	0.1381	-0.7130	0.8386	-1.6304
0.0118	0.9829	-0.0338	-0.0144	0.0547	0.0404	0.1309	-0.6356	0.3105	-1.2353
0.0141	0.9976	-0.0324	-0.0099	0.0553	0.0406	0.1277	-0.7207	0.3495	-1.3324
0.0188	1.0214	-0.0325	0.0002	0.0527	0.0365	0.1289	-0.6354	0.5131	-1.6344
0.0235	1.0418	-0.0328	-0.0024	0.0512	0.0366	0.1202	-0.6682	-0.0789	-1.6268
0.0235	1.0451	-0.0389	-0.0072	0.0479	0.0328	0.1009	-0.5961	0.1661	-0.2784
0.0353	1.0967	-0.0405	-0.0133	0.0333	0.0241	0.0757	-0.2502	0.0424	-0.3148
0.0471	1.1218	-0.0374	-0.0102	0.0192	0.0175	0.0603	-0.0189	0.0148	-0.3095
0.0941	1.0979	-0.0343	0.0037	0.0141	0.0132	0.0525	-0.0007	0.0291	-0.3781
0.1176	1.0846	-0.0314	0.0037	0.0125	0.0132	0.0534	-0.0005	0.0855	-0.4411
0.2353	1.1115	-0.0338	-0.0057	0.0152	0.0135	0.0537	-0.0130	0.0516	-0.3993
0.2353	1.0618	-0.0252	-0.0061	0.0125	0.0130	0.0511	0.0009	0.0088	-0.4305

Run#: [illegible]	M [illegible]	U_∞ [illegible] m/s
[illegible]	X [illegible] cm	α [illegible]
RPM : [illegible]	Z [illegible] cm	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
Y/δ	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0071	0.7707	-0.1020	0.0159	0.0763	0.0527	0.1522	-1.2640	0.8562	-3.1238
0.0188	0.8653	-0.1081	0.0158	0.0642	0.0518	0.1829	-1.0529	1.0725	-3.6865
0.0336	0.9325	-0.1085	0.0046	0.0485	0.0439	0.1323	-0.6222	0.4347	-1.5009
0.0541	1.0151	-0.1087	0.0090	0.0279	0.0361	0.1176	-0.0496	-0.1214	-1.6849
0.0659	1.0193	-0.1091	0.0190	0.0246	0.0394	0.1128	-0.0158	0.1213	-1.8860
0.0776	1.0293	-0.1067	0.0189	0.0254	0.0311	0.1154	-0.0087	0.0300	-1.8582
0.0894	1.0228	-0.1040	0.0146	0.0243	0.0394	0.1108	0.0256	0.0071	-1.8851
0.1012	1.0303	-0.1019	0.0170	0.0250	0.0321	0.1138	0.0080	-0.0694	-1.7506
0.1435	1.0357	-0.0908	0.0168	0.0246	0.0392	0.1143	-0.0027	0.1054	-2.0846
0.1600	1.0270	-0.0916	0.0227	0.0249	0.0385	0.1138	-0.0288	0.0352	-2.0088

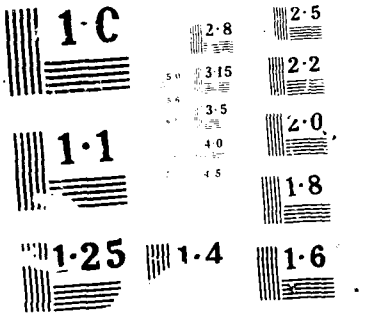
Run#: [illegible]	M [illegible]	U_∞ 262.1 m/s
NACA [illegible]	R_x [illegible]	α [illegible] 0 °
RLM : [illegible]	ν 0.000 [illegible]	δ [illegible] 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(inch)	$\frac{U}{U_\infty}$	$\frac{V}{U_\infty}$	$\frac{W}{U_\infty}$	$\frac{U'}{U_\infty}$	$\frac{V'}{U_\infty}$	$\frac{W'}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0059	0.7635	-0.0983	0.0114	0.0709	0.0515	0.1459	-1.2142	0.3449	-1.6980
0.0118	0.7608	-0.1025	0.0121	0.0732	0.0536	0.1555	-1.3796	0.3098	-2.7974
0.0176	0.8026	-0.1041	0.0276	0.0661	0.0482	0.1429	-1.0488	0.0619	-2.5992
0.0235	0.8464	-0.1050	0.0062	0.0558	0.0461	0.1352	-0.7607	0.8161	-2.5075
0.0353	0.9028	-0.1081	0.0096	0.0501	0.0424	0.1266	-0.6523	0.3289	-2.1999
0.0471	0.9447	-0.1085	0.0129	0.0386	0.0382	0.1264	-0.3900	0.2237	-2.4374
0.0588	0.9727	-0.1098	0.0076	0.0282	0.0351	0.1229	-0.0576	0.2349	-2.4885
0.0706	0.9846	-0.1079	0.0151	0.0266	0.0350	0.1240	0.0041	-0.1614	-2.8100
0.0824	0.9864	-0.1044	0.0104	0.0244	0.0319	0.1123	0.0103	-0.0234	-2.3022
0.0941	0.9837	-0.1027	0.0049	0.0245	0.0350	0.1138	-0.0101	0.1503	-2.3707
0.1176	0.9892	-0.1010	0.0046	0.0239	0.0334	0.1121	0.0191	-0.1488	-2.2921
0.1765	0.9899	-0.0883	0.0079	0.0240	0.0352	0.1120	-0.0047	0.1066	-2.2754
0.2353	0.9894	-0.0799	0.0037	0.0239	0.0360	0.1158	0.0141	-0.1838	-2.3581

[illegible]	[illegible]	[illegible] (deg)	[illegible]	[illegible] (RPM)	Z (rel)	[illegible] (deg)	[illegible]
1	[illegible]	0	[illegible]	6950	4.50	1	Y
2	[illegible]	0	[illegible]	6950	[illegible]	0	Y
3	[illegible]	0	[illegible]	6950	5.50	0	Y
4	[illegible]	0	[illegible]	6950	5.75	1	Y

AD-A193 818 STUDY OF THREE DIMENSIONAL TRANSONIC FLOW SEPARATIONS (U) AMF INC WHITE PLAINS NY P K OWEN ET AL. APR 88 ARO-17983.2-CS DAAG29-81-C-0028 2/3

UNCLASSIFIED F/G 19/10 NL


1·C
2·8
2·5
3·15
2·2
3·5
2·0
1·1
4·0
1·8
1·25
1·4
1·6

Run#: 010	M = 0.800	U∞=262.1 m/s
NOSE:BLUNT	X 4.500 cal	α = 0 °
RPM : 6950	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0059	0.8633	-0.0056	0.0615	0.0849	0.0452	0.2655	-0.8568	0.5142	-9.8899
0.0118	0.9068	-0.0051	0.0150	0.0756	0.0423	0.1556	-0.7527	0.3646	-3.8708
0.0176	0.9477	-0.0030	0.0045	0.0578	0.0383	0.1424	-0.2795	0.4095	-2.7137
0.0235	0.9738	-0.0030	-0.0056	0.0471	0.0345	0.1310	-0.2553	0.1778	-2.2804
0.0353	1.0181	-0.0015	-0.0143	0.0256	0.0303	0.1175	-0.0369	0.1794	-2.1185
0.0471	1.0335	0.0057	-0.0055	0.0273	0.0285	0.1236	0.0008	-0.1788	-2.7944
0.0706	1.0229	0.0042	0.0059	0.0252	0.0264	0.1196	0.0108	-0.0954	-2.5369
0.1176	1.0225	0.0030	0.0017	0.0247	0.0249	0.1190	-0.0297	0.0993	-2.3888

Run#: 502	M = 0.800	U∞ 257.9 m/s
NOSE:BLUNT	X = 5.000 cal	α = 0 °
RPM : 6950	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0035	0.9554	-0.0523	0.0625	0.0639	0.0329	0.1247	-0.6001	-0.0014	-1.0891
0.0071	0.9490	-0.0248	-0.0098	0.0642	0.0332	0.1386	-0.8593	0.7617	-1.6255
0.0094	0.9825	-0.0369	-0.0037	0.0634	0.0417	0.1540	-0.7228	0.2748	-2.0169
0.0141	1.0186	-0.0418	-0.0109	0.0566	0.0391	0.1360	-0.6223	0.5212	-1.7193
0.0188	1.0421	-0.0360	-0.0088	0.0554	0.0371	0.1280	-0.6494	0.1183	-1.3108
0.0212	1.0619	-0.0414	-0.0179	0.0509	0.0378	0.1287	-0.5876	0.2133	-1.6406
0.0235	1.0677	-0.0379	-0.0110	0.0479	0.0366	0.1246	-0.4746	0.2027	-1.5613
0.0329	1.1082	-0.0375	-0.0186	0.0363	0.0312	0.1157	-0.2392	0.1641	-1.6703
0.0471	1.1362	-0.0355	-0.0125	0.0262	0.0260	0.1020	0.0055	-0.2118	-1.4857
0.0706	1.1305	-0.0309	-0.0196	0.0235	0.0220	0.1021	-0.0183	0.0665	-1.6051
0.1176	1.1094	-0.0295	0.0003	0.0221	0.0225	0.0964	-0.0118	0.0057	-1.5738
0.2353	1.0810	-0.0231	0.0043	0.0191	0.0209	0.0892	0.0164	-0.0853	-1.1788

Run#: 004	M 0.850	U∞ 261.6 m/s
MEASUREMENT	X 5.500 cal	α = 0 °
RFM : 6050	Z 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0235	0.7504	-0.0996	0.0549	0.0840	0.0750	0.1650	-1.3504	0.5841	-3.5785
0.0353	0.7820	-0.1028	0.0443	0.0750	0.0561	0.1535	-1.6112	0.8358	-2.5834
0.0471	0.9126	-0.1113	0.0132	0.0531	0.0459	0.1318	-0.6291	0.7282	-2.6375
0.0588	0.9717	-0.1135	0.0145	0.0424	0.0470	0.1256	-0.3947	0.3750	-2.5235
0.0706	1.0003	-0.1132	0.0106	0.0266	0.0402	0.1099	-0.0910	0.1130	-1.7783
0.0824	1.0149	-0.1118	0.0172	0.0253	0.0407	0.1117	-0.0063	0.0846	-2.1245
0.0941	1.0071	-0.1036	0.0185	0.0248	0.0371	0.1102	0.0430	-0.0009	-2.0441
0.1059	1.0144	-0.1084	0.0135	0.0244	0.0400	0.1093	-0.0332	0.2537	-2.0702
0.1176	1.0108	-0.1055	0.0127	0.0244	0.0378	0.1148	0.0722	-0.1395	-2.0963
0.1765	1.0165	-0.0935	0.0143	0.0246	0.0401	0.1107	-0.0062	0.1505	-2.1471
0.2353	1.0168	-0.0901	0.0134	0.0249	0.0401	0.1121	-0.0796	0.5238	-2.1594

Run#: 006	M 6.800	U∞= 262.1 m/s
NOTE:BLUNT	X 5.750 cal	α = 0 °
RPM : 6950	Z 0.300 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0059	0.7060	-0.0962	0.0974	0.0848	0.0521	0.2286	-1.4376	1.2988	-5.4981
0.0118	0.7628	-0.1009	0.0444	0.0699	0.0549	0.1579	-1.4951	1.4443	-3.1672
0.0176	0.8028	-0.1010	0.0601	0.0721	0.0484	0.1917	-1.1806	0.4745	-5.3503
0.0235	0.8341	-0.1026	0.0401	0.0608	0.0488	0.1413	-1.1659	0.4534	-2.0957
0.0353	0.8990	-0.1075	0.0286	0.0504	0.0416	0.1373	-0.6328	0.7645	-2.4680
0.0471	0.9465	-0.1116	0.0131	0.0386	0.0395	0.1252	-0.3380	0.4785	-2.5235
0.0588	0.9775	-0.1107	-0.0010	0.0263	0.0379	0.1109	-0.0201	0.1526	-2.0320
0.0706	0.9827	-0.1087	0.0074	0.0267	0.0335	0.1184	-0.0128	0.0418	-2.5713
0.0824	0.9868	-0.1026	-0.0024	0.0243	0.0362	0.1138	-0.0067	-0.0196	-2.3053
0.0941	0.9891	-0.1031	-0.0028	0.0243	0.0336	0.1154	-0.0219	-0.0170	-2.3651
0.1176	0.9877	-0.0975	0.0071	0.0264	0.0346	0.1244	-0.0161	0.0640	-2.8286
0.1765	0.9930	-0.0902	0.0011	0.0257	0.0352	0.1240	-0.0628	0.2458	-2.7019
0.2353	0.9938	-0.0796	-0.0019	0.0238	0.0377	0.1180	0.0506	-0.2161	-2.3699

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
119	0.8	10	BLUNT	0	5.00	-60	Y
76	0.8	10	BLUNT	0	5.00	0	Z
105	0.8	10	BLUNT	0	5.00	0	Z
107	0.8	10	BLUNT	0	5.00	0	Z
111	0.8	10	BLUNT	0	5.00	0	Z
138	0.8	10	BLUNT	0	5.00	60	Y

Run#: 119	M = 0.800	U_∞ = 262.2 m/s
NOSE: BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0118	0.7950	-0.0715	-0.0560	0.0616	0.0385	0.1318	-1.0633	0.7771	-2.9636
0.0176	0.8600	-0.0762	-0.0670	0.0574	0.0406	0.1405	-0.8449	0.8729	-2.5063
0.0235	0.9220	-0.0818	-0.0922	0.0543	0.0388	0.1372	-0.7996	0.9140	-2.9112
0.0294	0.9731	-0.0820	-0.1186	0.0501	0.0369	0.1306	-0.6317	0.3501	-1.3603
0.0353	1.0169	-0.0832	-0.1297	0.0446	0.0343	0.1235	-0.3058	0.2383	-2.3655
0.0412	1.0570	-0.0772	-0.1359	0.0354	0.0304	0.1157	-0.1798	0.1077	-1.8702
0.0471	1.0765	-0.0806	-0.1203	0.0273	0.0286	0.1110	-0.0056	-0.1228	-2.0255
0.0529	1.0835	-0.0772	-0.1211	0.0242	0.0264	0.1078	0.0232	-0.0451	-1.8953
0.0588	1.0917	-0.0777	-0.1196	0.0235	0.0264	0.1101	0.0558	-0.1266	-2.0252
0.0706	1.0838	-0.0737	-0.1139	0.0239	0.0254	0.1082	0.0195	-0.0114	-1.9494
0.0941	1.0810	-0.0667	-0.1161	0.0235	0.0250	0.1044	0.0195	-0.0363	-1.8412
0.1176	1.0754	-0.0625	-0.1064	0.0239	0.0242	0.1103	0.0370	-0.0914	-2.0547

Run#: 076	M = 0.800	U_∞ 262.4 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.064 cal	δ 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.4706	1.0458	0.1551	0.1327	0.0198	0.0252	0.0899	-0.0261	-0.2301	-1.0250
-0.4235	1.0525	0.1435	0.1391	0.0196	0.0227	0.0903	-0.0282	-0.2652	-0.9419
-0.3765	1.0611	0.1325	0.1490	0.0200	0.0245	0.0882	-0.0519	-0.1074	-0.9141
-0.3294	1.0590	0.1147	0.1467	0.0207	0.0257	0.0895	-0.0944	-0.0359	-0.9643
-0.2824	1.0635	0.0937	0.1487	0.0206	0.0259	0.0887	-0.1052	-0.1358	-0.9130
-0.2353	1.0683	0.0707	0.1577	0.0212	0.0295	0.0867	-0.1702	-0.1815	-0.9782
-0.1882	1.0655	0.0390	0.1527	0.0218	0.0301	0.0947	-0.1686	-0.1258	-1.3168
-0.1412	1.0701	0.0046	0.1355	0.0215	0.0334	0.0989	-0.1656	0.0981	-1.3430
-0.0941	1.0697	-0.0292	0.0980	0.0241	0.0306	0.1077	-0.0769	-0.0494	-1.5766
-0.0471	1.0908	-0.0452	0.0106	0.0266	0.0238	0.1217	-0.0030	-0.3478	-2.3617
0.0000	1.0814	-0.0548	-0.0160	0.0266	0.0260	0.1208	0.0040	-0.3839	-2.1613
0.0471	1.0837	-0.0569	-0.0627	0.0265	0.0245	0.1237	0.0230	-0.4575	-2.0664
0.0941	1.0693	-0.0354	-0.1411	0.0287	0.0288	0.1265	0.0065	-0.6391	-1.9861
0.1412	1.0749	0.0067	-0.1913	0.0276	0.0293	0.1212	0.0584	-0.2866	-1.7376
0.1882	1.0797	0.0401	-0.1956	0.0247	0.0255	0.1155	0.0159	-0.2580	-1.5903
0.2353	1.0802	0.0729	-0.1833	0.0237	0.0241	0.1081	-0.0037	-0.2743	-1.7588
0.2824	1.0690	0.0945	-0.1569	0.0218	0.0268	0.1025	0.0092	-0.3102	-1.5075
0.3294	1.0638	0.1141	-0.1440	0.0213	0.0271	0.1035	0.0074	-0.2241	-1.4038
0.3765	1.0603	0.1300	-0.1502	0.0226	0.0263	0.1097	-0.0202	-0.1859	-1.6307
0.4706	1.0560	0.1526	-0.1600	0.0292	0.0300	0.1392	-0.0018	-0.3529	-2.7888

Run#: 105	M 0.800	U∞= 261.5 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
REM : 0000	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3294	1.0415	0.1199	0.1898	0.0293	0.0323	0.1076	-0.0631	-0.2137	-1.6922
-0.2824	0.9963	0.0966	0.1619	0.0561	0.0488	0.1464	0.8964	1.0361	0.6319
-0.2353	0.9534	0.0545	0.1453	0.0593	0.0660	0.1624	1.4146	1.4026	0.2990
-0.1882	0.9175	-0.0273	0.0801	0.0593	0.0550	0.1642	-0.5306	1.7752	-1.2536
-0.1412	0.9646	-0.0650	0.0012	0.0687	0.0459	0.1564	-1.2913	0.8050	-4.1527
-0.0941	1.0633	-0.0816	-0.0349	0.0487	0.0317	0.1277	-0.2116	-0.4768	-2.8292
-0.0471	1.0955	-0.0712	-0.0082	0.0307	0.0296	0.1264	-0.0665	-0.4335	-2.4676
0.0000	1.0875	-0.0646	0.0246	0.0301	0.0332	0.1191	0.0095	-0.1721	-1.9849
0.0471	1.0408	-0.0665	0.0548	0.0452	0.0344	0.1253	0.1599	-0.0949	-1.5714
0.0941	0.9379	-0.0532	0.0616	0.0577	0.0376	0.1454	0.0550	0.2035	-0.1887
0.1176	0.8983	-0.0097	-0.0299	0.0588	0.0663	0.1952	0.8291	-4.0252	-3.2697
0.1412	0.8774	-0.0083	-0.0317	0.0586	0.0542	0.1567	0.5923	-2.4546	-2.8789
0.1882	0.9770	0.0788	-0.1519	0.0834	0.0553	0.1780	2.5019	-2.0684	-6.4603
0.2353	1.0469	0.1253	-0.1861	0.0397	0.0342	0.1194	0.2795	-0.2868	-2.3179
0.2824	1.0570	0.1456	-0.1831	0.0248	0.0288	0.1148	-0.0338	-0.2192	-1.9869
0.3294	1.0507	0.1601	-0.1673	0.0243	0.0273	0.1165	-0.0444	-0.2241	-2.1668
0.3765	1.0445	0.1732	-0.1376	0.0253	0.0259	0.1149	-0.0249	-0.3120	-2.0812
0.4235	1.0427	0.1772	-0.1254	0.0242	0.0260	0.1126	-0.0291	-0.3543	-2.0200
0.4706	1.0406	0.1871	-0.1136	0.0239	0.0237	0.1129	0.0026	-0.4455	-1.9912

Run#: 107	M = 0.800	U∞ = 260.1 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RFM : 0600	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0539	0.1755	0.1330	0.0276	0.0270	0.1226	-0.0279	-0.0408	-1.5358
-0.3765	1.0621	0.1527	0.1988	0.0244	0.0295	0.1114	-0.1117	-0.2174	-1.4139
-0.3294	1.0754	0.1400	0.2154	0.0252	0.0293	0.1110	-0.1120	-0.1814	-1.8209
-0.2824	1.0768	0.1183	0.2247	0.0249	0.0313	0.1068	-0.1338	-0.2477	-1.4048
-0.2353	1.0727	0.0985	0.2307	0.0273	0.0369	0.1178	-0.0726	-0.3134	-1.6344
-0.1882	1.0453	0.0687	0.2257	0.0404	0.0438	0.1289	0.3879	0.2781	-1.5453
-0.1412	1.0188	0.0181	0.1885	0.0466	0.0532	0.1411	0.3412	1.4721	-0.6945
-0.1176	0.9993	-0.0158	0.1362	0.0476	0.0512	0.1380	-0.3051	1.7403	-1.2529
-0.0941	1.0076	-0.0551	0.0667	0.0543	0.0448	0.1653	-0.8036	0.5920	-3.3773
-0.0471	1.0805	-0.0728	0.0353	0.0469	0.0348	0.1317	-0.2186	-0.3796	-2.1842
0.0000	1.1042	-0.0669	0.0595	0.0389	0.0319	0.1170	-0.1004	-0.1993	-1.9534
0.0471	1.0920	-0.0678	0.0680	0.0365	0.0358	0.1261	-0.0853	-0.1809	-1.4441
0.0706	1.0601	-0.0673	0.0651	0.0452	0.0382	0.1331	-0.1947	0.2581	-0.3942
0.0941	1.0103	-0.0578	0.0590	0.0496	0.0402	0.1413	-0.3521	0.1380	-0.4905
0.1412	0.9605	-0.0227	0.0065	0.0506	0.0479	0.1707	-0.2171	-0.2190	-1.1406
0.1882	0.9964	0.0343	-0.0961	0.0538	0.0552	0.1735	0.8101	-1.5099	-3.1726
0.2353	1.0647	0.0928	-0.1228	0.0552	0.0482	0.1799	0.9065	-0.4822	0.1593
0.2824	1.0852	0.1252	-0.1348	0.0286	0.0369	0.1294	-0.0655	-0.1926	-1.1370
0.3294	1.0777	0.1428	-0.1090	0.0289	0.0333	0.1307	-0.0727	-0.4200	-1.5547
0.3765	1.0731	0.1620	-0.1145	0.0314	0.0342	0.1451	-0.0906	-0.3472	-0.8815
0.4235	1.0702	0.1722	-0.0905	0.0293	0.0328	0.1337	-0.0905	-0.5277	-1.2704
0.4706	1.0702	0.1804	-0.0745	0.0295	0.0320	0.1395	-0.0505	-0.5186	-1.5830
0.5176	1.0635	0.1914	-0.0512	0.0308	0.0337	0.1516	0.0055	-0.3620	-1.6395

Run#: 111	M 0.866	U∞ 261.7 m/s
NOSE:BLUNT	X = 5.000 cal	α 10 °
RPM : 0000	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3765	1.0583	0.1690	0.1957	0.0216	0.0254	0.0980	-0.0564	-0.2130	-1.3448
-0.3294	1.0600	0.1557	0.1984	0.0221	0.0265	0.0992	-0.0686	-0.3089	-1.4026
-0.2353	1.0717	0.1201	0.2252	0.0208	0.0300	0.1021	-0.0159	-0.5228	-1.4284
-0.1882	1.0787	0.0932	0.2226	0.0219	0.0308	0.1001	-0.1133	-0.2480	-1.4813
-0.1412	1.0708	0.0544	0.2203	0.0287	0.0352	0.1102	-0.0523	-0.0316	-1.6693
-0.0941	1.0498	0.0047	0.1967	0.0341	0.0392	0.1180	-0.1761	0.1021	-1.1433
-0.0471	1.0619	-0.0384	0.1202	0.0366	0.0321	0.1257	-0.2142	0.0296	-1.9696
-0.0235	1.0838	-0.0439	0.0934	0.0327	0.0314	0.1213	-0.1153	-0.1914	-2.0169
0.0000	1.1030	-0.0410	0.0865	0.0292	0.0293	0.1178	-0.0190	-0.3539	-1.8637
0.0471	1.0990	-0.0440	0.0901	0.0270	0.0301	0.1184	-0.0718	-0.2283	-1.9897
0.0941	1.0532	-0.0367	0.1083	0.0361	0.0359	0.1431	-0.1563	0.4547	-1.1334
0.1176	1.0318	-0.0200	0.0599	0.0403	0.0400	0.1588	0.0386	0.6905	-0.5795
0.1412	1.0162	-0.0079	0.0066	0.0465	0.0403	0.1459	-0.0098	-0.2107	-0.8577
0.1882	1.0214	0.0361	-0.1345	0.0443	0.0407	0.1592	0.2080	-1.9449	-3.1004
0.2118	1.0373	0.0732	-0.2193	0.0379	0.0404	0.1667	0.0108	-1.5211	-1.7628
0.2353	1.0521	0.0921	-0.2399	0.0341	0.0382	0.1588	-0.0845	-0.8552	-0.5000
0.2588	1.0635	0.1144	-0.2050	0.0316	0.0358	0.1435	-0.1079	-0.5959	-0.2803
0.2824	1.0707	0.1219	-0.1806	0.0280	0.0341	0.1317	-0.1899	-0.2311	-1.0219
0.3294	1.0717	0.1479	-0.1321	0.0236	0.0338	0.1116	-0.0840	-0.5217	-1.3995
0.4235	1.0623	0.1741	-0.0987	0.0244	0.0318	0.1163	-0.0870	-0.2926	-1.8420
0.5176	1.0571	0.1965	-0.0766	0.0249	0.0347	0.1155	-0.1214	-0.3681	-1.7821

Run#: 138	M 0.8[illegible]0	[illegible]
NOSE:BLUNT	X [illegible].000 cal	α [illegible]
RPM : 0000	Z 0.000 cal	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\overline{U}/U\infty$	$\overline{V}/U\infty$	$\overline{W}/U\infty$	$\overline{U'}/U\infty$	$\overline{V'}/U\infty$	$\overline{W'}/U\infty$	$1000*\overline{U'V'}/U\infty^2$	$1000*\overline{V'W'}/U\infty^2$	$1000*\overline{W'U'}/U\infty^2$
0.0176	0.9860	-0.0669	0.1351	0.0770	0.0470	0.1587	0.3230	0.9969	2.1147
0.0235	1.0368	-0.0630	0.1520	0.0650	0.0454	0.1603	0.4514	0.9088	1.6995
0.0294	1.0676	-0.0566	0.1402	0.0503	0.0424	0.1414	0.1602	0.3466	-0.9357
0.0353	1.0902	-0.0596	0.1413	0.0389	0.0405	0.1311	0.1084	0.0806	-1.0295
0.0412	1.1052	-0.0638	0.1511	0.0316	0.0373	0.1273	-0.0185	0.1244	-1.2659
0.0471	1.1064	-0.0600	0.1275	0.0263	0.0379	0.1182	-0.0477	0.1071	-1.6146
0.0529	1.0982	-0.0609	0.1226	0.0246	0.0348	0.1157	-0.0691	-0.0279	-1.2046
0.0588	1.1079	-0.0665	0.1082	0.0277	0.0338	0.1252	-0.0366	0.0275	-1.7219
0.0706	1.1058	-0.0706	0.1078	0.0270	0.0305	0.1234	-0.0194	-0.0062	-2.0251
0.0824	1.1022	-0.0702	0.0960	0.0244	0.0306	0.1088	-0.0126	-0.0640	-1.2588
0.0941	1.1023	-0.0678	0.1028	0.0251	0.0324	0.1193	0.0082	-0.0995	-0.8535
0.1176	1.0840	-0.0663	0.0794	0.0240	0.0318	0.1126	-0.0070	-0.0427	-1.0261
0.1647	1.0702	-0.0570	0.0724	0.0238	0.0304	0.1134	-0.0390	-0.0424	-1.0818
0.2118	1.0662	-0.0539	0.0547	0.0243	0.0285	0.1085	0.0042	-0.0590	-1.2340

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Stat.
120	0.9	10	BLUNT	0	5.50	-60	Y
90	0.8	10	BLUNT	0	5.50	0	Y
93	0.8	10	BLUNT	0	5.50	0	Y
94	0.8	10	BLUNT	0	5.50	0	Y
98	0.8	10	BLUNT	0	5.50	0	Y
103	0.8	10	BLUNT	0	5.50	0	Y
135	0.8	10	BLUNT	0	5.50	60	Y

Run#: [illegible]	M [illegible]	U_∞ [illegible]	
Re/ft: [illegible]	X [illegible]	α [illegible]	
RM : [illegible]	Z [illegible]	δ -4.0	

	VELOCITY			RMS			SHEAR STRESS		
Y(cm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0235	0.6127	-0.1204	0.0348	0.0711	0.0479	0.1863	-1.5594	1.7599	-5.7990
0.0294	0.6748	-0.1212	0.0115	0.0727	0.0489	0.1653	-1.7604	1.8722	-4.6511
0.0353	0.7541	-0.1259	-0.0305	0.0698	0.0428	0.1577	-1.3592	0.9416	-3.3630
0.0412	0.8099	-0.1292	-0.0636	0.0645	0.0401	0.1566	-0.9103	1.0752	-4.4493
0.0471	0.8666	-0.1297	-0.0890	0.0564	0.0393	0.1445	-0.7089	0.6904	-3.2885
0.0529	0.9109	-0.1353	-0.1062	0.0521	0.0356	0.1403	-0.4922	0.3384	-3.4685
0.0588	0.9454	-0.1346	-0.1128	0.0450	0.0333	0.1312	-0.4100	0.4925	-2.6655
0.0647	0.9773	-0.1327	-0.1240	0.0388	0.0283	0.1219	-0.1120	0.1525	-2.4297
0.0706	0.9929	-0.1348	-0.1123	0.0306	0.0268	0.1239	-0.0603	0.0608	-2.1001
0.0941	1.0144	-0.1292	-0.1084	0.0239	0.0232	0.1104	-0.0147	0.0941	-1.9541
0.1176	1.0170	-0.1262	-0.1006	0.0234	0.0233	0.1136	-0.0040	0.0724	-2.0234

RUN#: 050	M 0.800	U_∞=263.8 m/s
NOSE:BLUNT	X 5.500 cal	α = 10 °
RIM : 0000	Y 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.5176	0.9877	0.1378	0.1845	0.0249	0.0256	0.1122	-0.0114	-0.3878	-2.0715
-0.4706	0.9933	0.1294	0.1996	0.0217	0.0263	0.1016	-0.0101	-0.4592	-1.5926
-0.4235	0.9940	0.1174	0.2164	0.0217	0.0267	0.1010	-0.0538	-0.1322	-1.6363
-0.3765	0.9876	0.0973	0.2317	0.0222	0.0286	0.1050	-0.0114	-0.4029	-1.7810
-0.3294	0.9884	0.0724	0.2420	0.0224	0.0282	0.1056	-0.0336	-0.3039	-1.7285
-0.2824	0.9783	0.0441	0.2538	0.0251	0.0396	0.1123	-0.0261	-0.5044	-1.4946
-0.2353	0.9556	0.0013	0.2304	0.0333	0.0580	0.1284	0.1450	0.3240	-1.1407
-0.1882	0.9318	-0.0672	0.1858	0.0386	0.0632	0.1497	-0.0977	3.3023	-2.0797
-0.1412	0.9413	-0.1235	0.1135	0.0410	0.0433	0.1415	-0.5440	1.2505	-3.5263
-0.0941	0.9531	-0.1483	0.0647	0.0356	0.0330	0.1328	-0.2353	0.1671	-2.8630
-0.0471	0.9694	-0.1569	0.0084	0.0267	0.0263	0.1204	0.0218	-0.4264	-1.9133
0.0000	0.9513	-0.1582	-0.0486	0.0334	0.0314	0.1260	-0.1338	-0.4631	-0.7241
0.0471	0.9080	-0.1374	-0.0938	0.0375	0.0413	0.1375	-0.3376	-0.8937	-1.4404
0.0941	0.8873	-0.0697	-0.1747	0.0448	0.0582	0.1509	-0.2853	-2.6416	-3.1017
0.1412	0.9337	0.0099	-0.2206	0.0456	0.0506	0.1514	0.5931	-1.0718	-2.5250
0.1882	0.9702	0.0674	-0.2362	0.0330	0.0397	0.1501	0.0532	-0.2546	-1.0846
0.2353	0.9757	0.0906	-0.2398	0.0263	0.0332	0.1291	-0.0265	-0.4446	-1.5410
0.2824	0.9800	0.1092	-0.2106	0.0246	0.0299	0.1232	-0.0389	-0.5808	-1.8725
0.3294	0.9709	0.1238	-0.1939	0.0240	0.0285	0.1203	-0.0574	-0.2869	-2.0388
0.3765	0.9898	0.1354	-0.1622	0.0294	0.0297	0.1117	-0.0191	0.7760	-1.9900

Run#: 093	M = 0.800	U∞=260.3 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	0.9866	0.1400	0.2610	0.0187	0.0182	0.0906	0.0120	-0.1866	-1.0896
-0.3765	0.9820	0.1275	0.2616	0.0185	0.0192	0.0880	-0.0006	-0.2017	-1.1202
-0.3294	0.9734	0.1123	0.2671	0.0262	0.0283	0.1256	-0.0162	-0.4160	-2.4197
-0.3059	0.9594	0.0960	0.2281	0.0267	0.0263	0.1237	0.0057	-0.0477	-0.1143
-0.2824	0.9287	0.0766	0.2125	0.0389	0.0298	0.1800	0.1218	0.3719	1.2765
-0.2588	0.8800	0.0424	0.1819	0.0484	0.0373	0.2160	0.1844	0.0514	3.4491
-0.2118	0.8205	-0.0453	0.1684	0.0375	0.0425	0.1605	-0.0703	0.0004	-0.7464
-0.1882	0.8159	-0.0738	0.1735	0.0385	0.0516	0.1673	-0.2799	0.4436	-1.5566
-0.1647	0.8313	-0.1193	0.1351	0.0341	0.0382	0.1440	-0.2229	-0.0083	-1.8236
-0.1412	0.8552	-0.1407	0.1363	0.0424	0.0461	0.1625	-0.5498	0.0718	-1.9645
-0.1176	0.8974	-0.1679	0.1283	0.0349	0.0310	0.1583	-0.1008	-0.1689	-1.1491
-0.0941	0.9405	-0.1758	0.1004	0.0357	0.0320	0.1566	-0.0609	-0.3957	-2.2579
-0.0706	0.9656	-0.1817	0.0655	0.0257	0.0223	0.1225	-0.0067	-0.3279	-2.0317
-0.0471	0.9703	-0.1782	0.0640	0.0255	0.0303	0.1185	-0.0842	-0.4023	-2.1491
-0.0235	0.9683	-0.1841	0.0456	0.0224	0.0213	0.1084	-0.0064	-0.2897	-1.6285
0.0000	0.9658	-0.1774	0.0551	0.0271	0.0283	0.1170	-0.0588	-0.3315	-2.3614
0.0235	0.9152	-0.1826	0.0950	0.0312	0.0256	0.1369	-0.0133	-0.3495	-1.8897
0.0471	0.8819	-0.1728	0.0846	0.0322	0.0280	0.1420	-0.0343	-0.2228	-1.0506
0.0941	0.8075	-0.1286	0.0257	0.0341	0.0346	0.1449	-0.1491	-0.2190	-1.5377
0.1412	0.7752	-0.0644	-0.0739	0.0379	0.0372	0.1740	-0.0349	-0.5090	-2.9897
0.1882	0.8220	0.0200	-0.2054	0.0532	0.0378	0.2395	0.3432	-1.1650	-6.6797
0.2118	0.9061	0.0699	-0.2207	0.0491	0.0336	0.2035	0.3077	-0.8443	-3.0193
0.2353	0.9390	0.0871	-0.2363	0.0385	0.0273	0.1770	0.1622	-0.1994	-1.2828
0.2588	0.9794	0.1068	-0.2132	0.0223	0.0233	0.1054	-0.0138	-0.1672	-1.3447
0.2824	0.9783	0.1129	-0.1990	0.0204	0.0206	0.0958	0.0055	-0.1768	-1.2609
0.3294	0.9859	0.1271	-0.1839	0.0205	0.0191	0.0956	0.0025	-0.2637	-1.5615
0.3765	0.9863	0.1365	-0.1741	0.0193	0.0200	0.0928	0.0019	-0.2683	-1.3777
0.4235	0.9876	0.1452	-0.1577	0.0195	0.0200	0.0936	0.0016	-0.2763	-1.4747
0.4706	0.9880	0.1512	-0.1445	0.0197	0.0181	0.0942	-0.0101	-0.1688	-1.4906
0.5176	0.9883	0.1574	-0.1367	0.0195	0.0189	0.0926	0.0149	-0.3000	-1.4550
0.5647	0.9873	0.1610	-0.1244	0.0197	0.0187	0.0944	0.0266	-0.3583	-1.4711
0.6118	0.9892	0.1637	-0.1245	0.0209	0.0197	0.0994	0.0194	-0.3424	-1.6576

Run#: 094	M = 0.800	U∞=260.3 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	0.9851	0.1307	0.2438	0.0212	0.0207	0.1001	-0.0168	-0.2350	-1.8359
-0.3765	0.9845	0.1127	0.2487	0.0222	0.0251	0.1069	-0.0417	-0.3004	-1.9867
-0.3529	0.9805	0.1045	0.2555	0.0202	0.0220	0.0968	-0.0166	-0.2873	-1.5887
-0.3294	0.9796	0.0914	0.2520	0.0199	0.0234	0.0968	-0.0227	-0.3018	-1.3987
-0.3059	0.9686	0.0741	0.2336	0.0216	0.0261	0.1025	-0.0252	-0.2658	-1.0788
-0.2824	0.9548	0.0554	0.2261	0.0280	0.0303	0.1289	-0.0012	-0.1376	-0.7942
-0.2588	0.9252	0.0316	0.2262	0.0334	0.0342	0.1506	-0.0130	-0.0717	-0.0676
-0.2353	0.8982	0.0039	0.2141	0.0378	0.0364	0.1609	0.0164	0.4161	0.4201
-0.2118	0.8771	-0.0395	0.1979	0.0339	0.0409	0.1467	-0.0677	0.2954	-0.2464
-0.1882	0.8749	-0.0824	0.1785	0.0305	0.0404	0.1287	-0.1484	0.0085	-0.7258
-0.1647	0.8790	-0.1203	0.1579	0.0294	0.0363	0.1258	-0.1439	-0.1734	-1.1679
-0.1412	0.8996	-0.1478	0.1316	0.0293	0.0322	0.1283	-0.1672	-0.1118	-1.5980
-0.0941	0.9530	-0.1702	0.0936	0.0244	0.0243	0.1154	-0.0233	-0.3407	-1.5570
-0.0471	0.9685	-0.1742	0.0188	0.0206	0.0213	0.0982	-0.0109	-0.2311	-1.3074
0.0000	0.9312	-0.1701	0.0183	0.0239	0.0197	0.1110	-0.0175	-0.2291	-1.2988
0.0235	0.9017	-0.1616	0.0017	0.0275	0.0261	0.1240	-0.0651	-0.1159	-0.8558
0.0471	0.8665	-0.1400	-0.0277	0.0311	0.0340	0.1367	-0.1475	-0.0390	-0.8802
0.0941	0.8312	-0.0819	-0.0960	0.0316	0.0359	0.1383	-0.0449	-0.4820	-1.5882
0.1412	0.8388	-0.0094	-0.2054	0.0411	0.0341	0.1782	0.0538	-0.6375	-3.3949
0.1647	0.8821	0.0284	-0.2822	0.0431	0.0320	0.1860	0.1213	-0.5722	-3.8335
0.1882	0.9183	0.0541	-0.2830	0.0415	0.0262	0.1735	0.1485	-0.5987	-2.6653
0.2118	0.9604	0.0797	-0.2633	0.0294	0.0221	0.1330	0.0585	-0.1903	-1.0256
0.2353	0.9759	0.0917	-0.2447	0.0225	0.0212	0.1082	0.0243	-0.2913	-1.3619
0.2824	0.9825	0.1130	-0.2207	0.0205	0.0195	0.1012	0.0136	-0.3376	-1.6076
0.3294	0.9812	0.1268	-0.2008	0.0201	0.0192	0.0965	-0.0128	-0.1558	-1.5476
0.3765	0.9812	0.1357	-0.1831	0.0207	0.0193	0.0983	0.0190	-0.3044	-1.6831
0.4235	0.9837	0.1426	-0.1763	0.0204	0.0193	0.0970	0.0063	-0.2435	-1.5922
0.4706	0.9825	0.1500	-0.1620	0.0200	0.0179	0.0979	0.0166	-0.3081	-1.5318
0.5176	0.9860	0.1534	-0.1552	0.0208	0.0178	0.1009	0.0292	-0.3264	-1.7137
0.5647	0.9842	0.1570	-0.1450	0.0212	0.0183	0.0997	0.0216	-0.2877	-1.6619
0.6118	0.9846	0.1602	-0.1351	0.0202	0.0177	0.0982	0.0102	-0.2679	-1.5769
0.6588	0.9850	0.1629	-0.1291	0.0221	0.0184	0.1059	0.0342	-0.3745	-1.8576
0.7059	0.9871	0.1648	-0.1170	0.0209	0.0180	0.1035	0.0394	-0.4054	-1.6934

Run#: 038	M = 0.800	U∞=261.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3294	0.9560	0.1124	0.2606	0.0299	0.0260	0.1302	0.1234	-0.3198	-1.3675
-0.3059	0.9181	0.0933	0.2596	0.0385	0.0264	0.1826	0.1994	0.2288	1.3316
-0.2824	0.8529	0.0599	0.2049	0.0593	0.0398	0.2146	0.9472	1.2571	3.3279
-0.2588	0.7859	0.0043	0.1371	0.0358	0.0357	0.1535	-0.0348	-0.2410	-1.1371
-0.2353	0.7778	-0.0389	0.1469	0.0317	0.0362	0.1307	-0.0917	-0.1667	-0.7384
-0.2118	0.7839	-0.0778	0.1345	0.0297	0.0337	0.1278	-0.1223	-0.0490	-0.8655
-0.1882	0.7993	-0.1118	0.1084	0.0297	0.0332	0.1251	-0.1584	-0.0711	-1.1936
-0.1412	0.8737	-0.1621	0.0523	0.0350	0.0263	0.1445	-0.0965	-0.1145	-0.5249
-0.0941	0.9450	-0.1803	0.0279	0.0291	0.0216	0.1284	0.0288	-0.1412	-0.5222
-0.0471	0.9625	-0.1792	0.0504	0.0227	0.0201	0.1064	0.0138	-0.2710	-1.4021
0.0000	0.9375	-0.1803	0.1463	0.0251	0.0202	0.1138	0.0275	-0.4528	-1.8723
0.0471	0.8742	-0.1620	0.2268	0.0304	0.0248	0.1305	-0.0613	-0.1655	-0.9384
0.0706	0.8303	-0.1447	0.2265	0.0333	0.0275	0.1411	-0.0865	-0.0878	-0.4391
0.0941	0.7958	-0.1271	0.2016	0.0311	0.0299	0.1462	-0.0594	-0.2172	-0.3625
0.1412	0.7334	-0.0700	0.0916	0.0326	0.0334	0.1483	-0.0879	-0.3816	-1.2191
0.1882	0.7343	0.0047	-0.1551	0.0502	0.0379	0.2401	0.3471	-2.2675	-9.0438
0.2118	0.8239	0.0576	-0.3747	0.0620	0.0338	0.2738	0.5569	-1.7197	-7.9993
0.2353	0.8935	0.0954	-0.3896	0.0520	0.0307	0.2402	0.3716	0.3661	1.0067
0.2824	0.9754	0.1280	-0.2120	0.0233	0.0239	0.1107	0.0177	-0.1308	-1.1062
0.3294	0.9807	0.1367	-0.1856	0.0214	0.0213	0.1040	-0.0088	-0.2297	-1.4722
0.4235	0.9829	0.1416	-0.1747	0.0219	0.0258	0.1035	-0.0432	-0.2272	-1.5127

Run#: 103	M = .800	U∞=261.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.141 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	0.9856	0.1430	0.1782	0.0243	0.0259	0.1140	-0.0208	-0.3199	-2.0490
-0.3294	0.9854	0.1094	0.1982	0.0225	0.0271	0.1032	-0.0758	-0.2622	-1.7348
-0.2353	0.9878	0.0617	0.2105	0.0239	0.0310	0.1112	-0.0852	-0.3887	-1.9992
-0.1882	0.9889	0.0275	0.2060	0.0231	0.0366	0.1050	-0.1472	-0.5203	-1.7171
-0.1412	0.9925	-0.0133	0.1915	0.0249	0.0388	0.1128	-0.2220	0.0242	-2.1830
-0.0941	0.9936	-0.0545	0.1467	0.0237	0.0353	0.1097	-0.1161	-0.1350	-1.8871
-0.0471	0.9899	-0.0846	0.0878	0.0236	0.0335	0.1096	-0.0873	0.0627	-1.9125
0.0000	0.9880	-0.0955	0.0296	0.0241	0.0302	0.1123	-0.0594	-0.2791	-1.9486
0.0471	0.9852	-0.0995	-0.0328	0.0245	0.0314	0.1133	0.0077	-0.3331	-2.1045
0.0941	0.9856	-0.0841	-0.1102	0.0256	0.0364	0.1171	0.0602	-0.8664	-2.2401
0.1412	0.9807	-0.0463	-0.1677	0.0234	0.0323	0.1091	0.0807	-0.6917	-1.7934
0.1882	0.9862	0.0012	-0.1901	0.0242	0.0307	0.1165	0.0547	-0.3742	-2.0235
0.2353	0.9864	0.0476	-0.1926	0.0228	0.0317	0.1061	0.0199	-0.2293	-1.6812
0.2824	0.9857	0.0803	-0.1753	0.0248	0.0306	0.1116	0.0210	-0.3437	-1.8882
0.3765	0.9931	0.1273	-0.1508	0.0235	0.0271	0.1098	-0.0338	-0.1551	-1.7062
0.4706	0.9911	0.1520	-0.1282	0.0235	0.0263	0.1066	0.0185	-0.3889	-1.6540
0.5647	0.9926	0.1711	-0.1020	0.0230	0.0243	0.1074	-0.0221	-0.1916	-1.6410

Run#: 135	M 0.800	U∞=2	2.6 m/s
NOSE:BLUNT	X = 5.500 cal	α =	10 °
RPM : 0000	Z = 0.000 cal	δ =	60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0094	0.4872	-0.0644	-0.0697	0.0956	0.1260	0.2400	-1.2512	-1.7500	6.9158
0.0141	0.5678	-0.1040	0.0074	0.1018	0.0593	0.1747	-1.2103	2.0472	3.1006
0.0176	0.6633	-0.1076	0.0538	0.1120	0.0537	0.1946	-0.0545	2.2347	4.6807
0.0235	0.7572	-0.1056	0.1048	0.1127	0.0487	0.1908	0.1653	1.3146	5.3738
0.0294	0.8269	-0.1046	0.1311	0.1060	0.0466	0.1859	0.5608	0.9020	3.8524
0.0353	0.8769	-0.1078	0.1516	0.0873	0.0445	0.1637	0.1701	0.7702	1.6585
0.0412	0.9175	-0.1072	0.1516	0.0725	0.0440	0.1512	0.2503	0.4353	1.2670
0.0471	0.9584	-0.1069	0.1566	0.0558	0.0419	0.1302	0.2365	0.1599	0.0749
0.0529	0.9827	-0.1059	0.1613	0.0403	0.0392	0.1112	0.1408	0.1302	-0.7763
0.0588	0.9931	-0.1087	0.1550	0.0303	0.0384	0.1088	0.0134	0.1029	-0.7517
0.0706	1.0045	-0.1085	0.1478	0.0219	0.0380	0.1012	0.0189	0.0976	-1.0852
0.0824	1.0124	-0.1091	0.1336	0.0207	0.0372	0.0976	-0.0207	0.0894	-1.3259
0.0941	1.0167	-0.1070	0.1394	0.0203	0.0381	0.0936	0.0355	-0.1632	-1.1135
0.1176	1.0165	-0.1014	0.1271	0.0222	0.0430	0.0994	-0.0170	0.0793	-1.6172

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
118	0.8	10	BLUNT	6950	5.00	-60	Y
106	0.8	10	BLUNT	6950	5.00	0	Z
109	0.8	10	BLUNT	6950	5.00	0	Z
110	0.8	10	BLUNT	6950	5.00	0	Z
113	0.8	10	BLUNT	6950	5.00	0	Z
137	0.8	10	BLUNT	6950	5.00	60	Y

Run#: 118	M = 0.800	U∞=264.4 m/s
NOTE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 6950	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0118	0.6637	-0.0540	0.1295	0.0738	0.0474	0.1846	-1.1018	0.9633	-6.5860
0.0176	0.7127	-0.0592	0.1026	0.0744	0.0452	0.1772	-1.3548	1.8092	-5.7410
0.0235	0.7718	-0.0565	0.0367	0.0758	0.0442	0.1793	-1.0217	1.2792	-6.0686
0.0294	0.8425	-0.0612	-0.0222	0.0699	0.0459	0.1462	-0.7518	0.9670	-4.6769
0.0353	0.8853	-0.0520	-0.0509	0.0697	0.0432	0.1549	-0.6270	0.0779	-4.1778
0.0412	0.9442	-0.0568	-0.1120	0.0656	0.0425	0.1477	-0.5056	0.6610	-3.5907
0.0471	0.9939	-0.0485	-0.1106	0.0591	0.0376	0.1404	-0.3869	0.1820	-2.5640
0.0529	1.0406	-0.0491	-0.1222	0.0459	0.0350	0.1306	-0.1462	0.1595	-2.3785
0.0588	1.0650	-0.0456	-0.1310	0.0351	0.0306	0.1173	0.0506	-0.1285	-2.2697
0.0706	1.0861	-0.0451	-0.1233	0.0246	0.0263	0.1115	0.0281	-0.1631	-2.1244
0.0824	1.0877	-0.0454	-0.1241	0.0227	0.0254	0.1054	0.0413	-0.1218	-1.8826
0.0941	1.0833	-0.0449	-0.1250	0.0234	0.0249	0.1104	0.0109	-0.0459	-2.0063
0.1059	1.0827	-0.0460	-0.1257	0.0228	0.0255	0.1068	0.0367	-0.0650	-1.8199
0.1176	1.0759	-0.0491	-0.1268	0.0235	0.0259	0.1075	0.0084	0.1078	-1.8393
0.1765	1.0750	-0.0461	-0.1232	0.0226	0.0248	0.1064	0.0331	-0.0118	-1.7902
0.2353	1.0615	-0.0406	-0.0863	0.0239	0.0243	0.1084	0.0211	0.0200	-1.9930

Run#: 106	M = 0.800	U∞=261.1 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 6950	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1882	0.9061	0.0067	0.0939	0.0572	0.0562	0.1682	0.2853	1.5296	-0.7899
-0.0941	0.9336	-0.0586	0.0080	0.0909	0.0473	0.2183	-0.8725	-1.7176	-7.1161
-0.0471	1.0334	-0.0697	-0.0195	0.0559	0.0407	0.1448	-0.5439	-0.1957	-3.0116
-0.0235	1.0609	-0.0685	-0.0014	0.0467	0.0425	0.1383	-0.5489	-0.3005	-2.4736
0.0000	1.0716	-0.0705	0.0093	0.0392	0.0401	0.1367	-0.1693	-0.4454	-3.0308
0.0471	1.0637	-0.0718	0.0393	0.0359	0.0404	0.1283	-0.0534	0.1450	-2.2083
0.0941	1.0125	-0.0769	0.0561	0.0445	0.0424	0.1416	0.0144	0.0523	-1.1656
0.1412	0.9518	-0.0551	-0.0164	0.0509	0.0514	0.1522	-0.4170	-0.9941	-1.4979
0.2353	1.0441	0.1287	-0.2180	0.0437	0.0443	0.1294	0.7492	-0.4481	-2.3770
0.2588	1.0572	0.1478	-0.2185	0.0304	0.0337	0.1202	0.1753	-0.3613	-2.4079
0.2824	1.0567	0.1598	-0.2053	0.0253	0.0306	0.1179	-0.0354	-0.1850	-2.1699
0.3765	1.0484	0.1907	-0.1463	0.0239	0.0262	0.1161	-0.0058	-0.4268	-2.1143
0.4706	1.0409	0.1994	-0.1214	0.0248	0.0252	0.1131	-0.0308	-0.3997	-2.0405

Run#: 109	M = 0.800	U∞ = 262.3 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 6950	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0523	0.1730	0.1776	0.0230	0.0299	0.1088	-0.1247	-0.1781	-1.4939
-0.3765	1.0576	0.1577	0.1902	0.0234	0.0288	0.1056	-0.0901	-0.1903	-1.5321
-0.2824	1.0689	0.1263	0.1986	0.0232	0.0295	0.1061	-0.0825	-0.1969	-1.7853
-0.2353	1.0763	0.1069	0.1997	0.0235	0.0295	0.1032	-0.1119	-0.1068	-1.6727
-0.1882	1.0773	0.0862	0.1964	0.0251	0.0301	0.1055	-0.1318	0.0257	-1.8297
-0.1412	1.0404	0.0599	0.1982	0.0402	0.0357	0.1181	0.1211	0.1402	-1.3853
-0.1176	1.0006	0.0417	0.1715	0.0479	0.0392	0.1398	0.3041	0.5371	-0.2077
-0.0941	0.9586	0.0135	0.1473	0.0500	0.0430	0.1351	0.1443	0.8374	0.1325
-0.0706	0.9297	-0.0058	0.1049	0.0471	0.0405	0.1356	-0.2092	0.1838	-0.8584
-0.0471	0.9346	-0.0283	0.0649	0.0576	0.0380	0.1328	-0.3129	0.2651	-2.8603
-0.0235	0.9986	-0.0351	0.0258	0.0712	0.0372	0.1449	-0.4834	0.0404	-2.3171
0.0000	1.0623	-0.0431	0.0392	0.0516	0.0328	0.1343	-0.1539	-0.2805	-1.1182
0.0235	1.0960	-0.0452	0.0573	0.0315	0.0321	0.1140	-0.0689	-0.2701	-1.5147
0.0471	1.1017	-0.0464	0.0647	0.0266	0.0308	0.1101	-0.0894	-0.2312	-1.3913
0.0706	1.1014	-0.0520	0.0703	0.0252	0.0311	0.1059	-0.0785	-0.0200	-1.3970
0.0941	1.0848	-0.0592	0.0787	0.0320	0.0368	0.1267	-0.1443	-0.3150	-1.5971
0.1412	1.0445	-0.0569	0.0620	0.0399	0.0430	0.1424	-0.4140	0.1441	-1.4598
0.1647	1.0325	-0.0450	0.0499	0.0416	0.0387	0.1308	-0.2208	0.2902	-1.3758
0.1882	1.0211	-0.0070	0.0292	0.0495	0.0624	0.2033	-0.2229	-0.9914	-3.4457
0.2353	1.0030	0.0268	-0.1104	0.0555	0.0499	0.1551	-0.0228	-2.1391	-3.4892
0.2588	1.0154	0.0572	-0.1433	0.0507	0.0468	0.1481	0.1003	-1.9534	-3.4632
0.2824	1.0469	0.0987	-0.2113	0.04[illegible]	0.0428	0.1546	0.2246	-1.6579	-2.3342
0.3294	1.0769	0.1535	-0.1750	0.02[illegible]	0.0313	0.1200	-0.0676	-0.3715	-1.1586
0.3765	1.0642	0.1796	-0.1496	0.0259	0.0342	0.1178	-0.1375	-0.2646	-1.2848
0.4235	1.0614	0.1944	-0.1207	0.0288	0.0323	0.1107	-0.1128	-0.2398	-1.4005
0.5176	1.0518	0.2167	-0.0828	0.0279	0.0335	0.1136	-0.0726	-0.1472	-1.4741

Run#: 110	M = 0.800	U∞ = 261.9 m/s
NOSE: BLUNT	X = 5.000 cal	α = 10 °
RPM : 6950	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	1.0577	0.1656	0.1864	0.0220	0.0250	0.1012	-0.0245	-0.1870	-1.5058
-0.3294	1.0626	0.1428	0.1959	0.0215	0.0274	0.0957	-0.0715	-0.0478	-1.3996
-0.2353	1.0715	0.1095	0.1873	0.0233	0.0300	0.1041	-0.1158	-0.1383	-1.5909
-0.1882	1.0754	0.0914	0.1883	0.0215	0.0283	0.0987	-0.0801	-0.0809	-1.4556
-0.1412	1.0710	0.0686	0.1887	0.0241	0.0306	0.1024	-0.0475	-0.2417	-1.4302
-0.1176	1.0613	0.0554	0.1873	0.0300	0.0320	0.1165	0.0023	-0.1442	-1.4932
-0.0941	1.0298	0.0369	0.1841	0.0368	0.0359	0.1261	-0.0266	0.2780	-0.9914
-0.0706	0.9956	0.0170	0.1640	0.0432	0.0364	0.1354	-0.0389	0.2891	-0.1944
-0.0471	0.9703	-0.0035	0.1196	0.0486	0.0397	0.1394	-0.2670	0.3269	-0.7513
-0.0235	0.9861	-0.0256	0.0711	0.0533	0.0383	0.1391	-0.5635	0.5021	-2.6773
0.0000	1.0471	-0.0345	0.0465	0.0480	0.0350	0.1422	-0.2044	-0.0623	-1.6907
0.0235	1.0801	-0.0344	0.0485	0.0338	0.0315	0.1327	-0.0056	-0.2653	-1.2264
0.0471	1.0900	-0.0345	0.0493	0.0268	0.0300	0.1220	-0.0528	-0.1844	-1.0727
0.0706	1.0886	-0.0391	0.0497	0.0269	0.0311	0.1216	-0.1228	0.0352	-1.7753
0.0941	1.0881	-0.0401	0.0494	0.0260	0.0305	0.1126	-0.0732	-0.0447	-1.6541
0.1176	1.0855	-0.0375	0.0370	0.0278	0.0339	0.1205	-0.1076	-0.2854	-1.7785
0.1412	1.0768	-0.0259	0.0169	0.0293	0.0355	0.1224	-0.1509	-0.2669	-1.9247
0.1647	1.0739	-0.0083	-0.0376	0.0318	0.0378	0.1274	0.0046	-0.5285	-2.0866
0.1882	1.0693	0.0121	-0.0800	0.0362	0.0414	0.1309	-0.0130	-0.7069	-2.2119
0.2118	1.0735	0.0409	-0.1384	0.0297	0.0424	0.1306	-0.0227	-0.6426	-1.7596
0.2353	1.0736	0.0685	-0.1796	0.0307	0.0437	0.1356	-0.1565	-0.8707	-1.7808
0.2588	1.0767	0.0940	-0.1951	0.0286	0.0409	0.1321	-0.2513	-0.4860	-1.6247
0.2824	1.0744	0.1158	-0.1846	0.0275	0.0387	0.1283	-0.2013	-0.3400	-1.7367
0.3294	1.0679	0.1464	-0.1603	0.0264	0.0370	0.1232	-0.1475	-0.3698	-1.9664
0.3765	1.0609	0.1712	-0.1364	0.0241	0.0352	0.1123	-0.1191	-0.2877	-1.4340
0.4235	1.0560	0.1862	-0.1120	0.0261	0.0343	0.1210	-0.1153	-0.1906	-2.0405
0.5176	1.0438	[illegible]	-0.0658	0.0238	[illegible]	[illegible]	[illegible]	-0.1668	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.1194	-0.0932	[illegible]

RUN#: [illegible]	M [illegible]	[illegible]	
[illegible]	X [illegible]	α [illegible]	
MEM : [illegible]	Y [illegible]	δ [illegible]	

	VELOCITY			RMS			SHEAR STRESS		
Z(cm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.4235	1.0571	0.1622	0.1772	0.0205	0.0243	0.0347	-0.0523	-0.0192	-0.9372
-0.2824	1.0648	0.1291	0.1861	0.0217	0.0286	0.1021	-0.0680	-0.2986	-1.2638
-0.1882	1.0716	0.0962	0.1801	0.0202	0.0295	0.0960	-0.1132	-0.1885	-1.1373
-0.1412	1.0737	0.0781	0.1814	0.0214	0.0277	0.0990	-0.0937	-0.2597	-1.3433
-0.1176	1.0764	0.0674	0.1925	0.0224	0.0279	0.1012	-0.0880	-0.1618	-1.4359
-0.0941	1.0647	0.0534	0.2076	0.0247	0.0293	0.1176	-0.0814	-0.2133	-1.7303
-0.0706	1.0537	0.0409	0.2155	0.0296	0.0319	0.1274	-0.0065	-0.2296	-1.2332
-0.0471	1.0340	0.0203	0.1856	0.0372	0.0346	0.1339	-0.1092	0.1061	-0.4081
-0.0235	1.0297	-0.0013	0.1198	0.0434	0.0338	0.1499	-0.2414	0.2362	-1.9869
0.0000	1.0550	-0.0141	0.0472	0.0382	0.0298	0.1520	-0.0843	-0.0801	-2.3152
0.0235	1.0775	-0.0212	0.0414	0.0320	0.0281	0.1355	-0.0086	-0.1695	-1.1480
0.0471	1.0873	-0.0208	0.0414	0.0242	0.0268	0.1112	-0.0109	-0.3720	-1.1952
0.0706	1.0885	-0.0226	0.0484	0.0238	0.0260	0.1115	-0.0110	-0.3718	-1.4382
0.0941	1.0921	-0.0223	0.0287	0.0230	0.0271	0.1066	-0.0420	-0.2944	-1.3945
0.1176	1.0986	-0.0181	-0.0090	0.0242	0.0287	0.1166	-0.0192	-0.2965	-1.8370
0.1412	1.0935	-0.0074	-0.0372	0.0249	0.0323	0.1173	-0.0485	-0.5201	-1.7449
0.1882	1.0880	0.0303	-0.0812	0.0243	0.0379	0.1195	-0.0262	-0.7121	-1.8827
0.2353	1.0842	0.0641	-0.1306	0.0237	0.0403	0.1118	-0.1396	-0.5368	-1.6335
0.2588	1.0843	0.0804	-0.1340	0.0231	0.0419	0.1123	-0.0892	-0.6835	-1.4317
0.2824	1.0787	0.0975	-0.1363	0.0234	0.0398	0.1098	-0.1771	-0.5307	-1.4547
0.3294	1.0723	0.1233	-0.1407	0.0244	0.0366	0.1131	-0.1922	-0.4044	-1.7713
0.3765	1.0667	0.1542	-0.1208	0.0247	0.0358	0.1209	-0.0933	-0.6523	-1.2386
0.4706	1.0570	0.1877	-0.0826	0.0252	0.0312	0.1140	-0.0045	-0.4346	-1.2901

[illegible]		M [illegible]			[illegible]
[illegible]		X [illegible]			α [illegible]
[illegible]		Z [illegible]			δ [illegible]

	[illegible]			[illegible]			[illegible]		
Y [illegible]	$\frac{\bar{U}}{U_\infty}$	$\frac{\bar{V}}{U_\infty}$	$\frac{\bar{W}}{U_\infty}$	$\frac{\overline{u'}}{U_\infty}$	$\frac{\overline{v'}}{U_\infty}$	$\frac{\overline{w'}}{U_\infty}$	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0847	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0565	0.0472	[illegible]	[illegible]	[illegible]	[illegible]
0.0294	[illegible]	-0.0682	0.1960	0.0454	[illegible]	0.1468	[illegible]	[illegible]	[illegible]
0.0353	[illegible]	-0.0742	0.1881	0.0361	0.0418	0.1413	[illegible]	0.8052	-0.6421
0.0412	[illegible]	-0.0761	0.1819	0.0305	0.0397	[illegible]	[illegible]	0.4305	-1.4299
0.0471	1.1289	-0.0753	0.1656	0.0287	0.0392	0.1254	-0.1019	0.5921	-1.5702
0.0529	1.1285	-0.0759	0.1677	0.0265	0.0386	0.1237	[illegible]	0.4589	-1.6405
0.0588	1.1207	-0.0792	0.1467	0.0284	0.0362	0.1263	-0.1099	0.3999	-1.5841
0.0647	1.1188	-0.0676	0.1588	0.0278	0.0383	0.1233	-0.1427	0.2271	-1.5011
0.0706	1.1134	-0.0746	0.1439	0.0274	0.0365	0.1233	-0.1117	0.2615	-1.4184
0.0824	1.1095	-0.0698	0.1364	0.0274	0.0378	0.1260	-0.1304	0.3980	-1.6619
0.1176	1.0970	-0.0717	0.1226	0.0274	0.0343	0.1232	-0.1111	0.0074	-1.4211

Run	Mach	Alpha (deg)	Name	Spin (RPM)	X (cal)	Delta (deg)	Axis
127	0.8	10	BURT	6950	5.50	-60	Y
98	0.8	10	BURT	6950	5.50	0	Y
96	0.8	10	BURT	6950	5.50	0	Z
97	0.8	10	BURT	6950	5.50	0	Z
100	0.8	10	BURT	6950	5.50	0	Z
101	0.8	10	BURT	6950	5.50	0	Z
136	0.8	10	BURT	6950	5.50	60	Y

Run#: 121	M 0.800		U_∞ 261.9 m/s
[illegible]: BLANT	X 5.500 cal		α = 10 °
RPM : 6950	Z 0.000 cal		δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0235	0.6578	-0.0814	0.2510	0.0862	0.0425	0.2769	0.6152	2.2853	-8.5740
0.0294	0.6448	-0.0822	0.2447	0.0775	0.0443	0.2013	0.6933	2.1834	-1.3581
0.0353	0.6335	-0.0810	0.2140	0.0734	0.0414	0.1720	0.4434	1.5293	0.7189
0.0412	0.6277	-0.0855	0.1498	0.0657	0.0468	0.1671	-0.0263	2.1283	-0.2890
0.0471	0.6228	-0.0770	0.1316	0.0655	0.0489	0.1488	-0.7101	2.2311	-1.5239
0.0529	0.6498	-0.0838	0.0822	0.0695	0.0518	0.1587	-1.4103	2.6389	-3.3855
0.0588	0.6988	-0.0874	0.0323	0.0781	0.0508	0.1592	-1.5715	2.2108	-4.7586
0.0706	0.8069	-0.0874	-0.0467	0.0803	0.0447	0.1506	-1.2070	1.6872	-4.3758
0.0824	0.9137	-0.0904	-0.1050	0.0670	0.0379	0.1363	-0.6560	0.9613	-4.0179
0.0941	0.9881	-0.0867	-0.1202	0.0359	0.0325	0.1160	-0.0554	0.2953	-1.3702
0.1059	1.0080	-0.0906	-0.1248	0.0258	0.0274	0.1105	-0.0080	0.2495	-1.7855
0.1176	1.0123	-0.0890	-0.1206	0.0232	0.0271	0.1071	-0.0168	0.2873	-1.7697
0.1412	1.0127	-0.0946	-0.1158	0.0225	0.0244	0.1070	-0.0012	0.1086	-1.7650

Run#: 095	M = 0.800	U∞=261.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
REM : 6950	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3765	0.9735	0.0907	0.2271	0.0245	0.0188	0.1179	0.0271	-0.3582	-2.5800
-0.3294	0.9710	0.0725	0.2200	0.0235	0.0194	0.1149	0.0376	-0.4305	-2.3579
-0.2824	0.9610	0.0504	0.1958	0.0246	0.0221	0.1178	0.0611	-0.3809	-1.7496
-0.2353	0.9066	0.0132	0.1877	0.0365	0.0290	0.1604	0.1529	-0.1766	-0.4361
-0.1882	0.8391	-0.0463	0.1362	0.0351	0.0327	0.1574	0.0713	0.2434	0.0277
-0.1647	0.8266	-0.0683	0.1115	0.0317	0.0313	0.1318	0.0116	0.0618	-0.3326
-0.1412	0.8188	-0.0949	0.0888	0.0303	0.0320	0.1345	-0.0666	0.1961	-0.8346
-0.1176	0.8287	-0.1203	0.0962	0.0352	0.0331	0.1508	-0.1470	0.1274	-0.4077
-0.0941	0.8799	-0.1397	0.1036	0.0422	0.0289	0.1831	0.0187	-0.2387	-1.4742
-0.0706	0.9349	-0.1484	0.0862	0.0316	0.0246	0.1451	0.0145	-0.4633	-2.5243
-0.0471	0.9585	-0.1552	0.0231	0.0232	0.0218	0.1056	-0.0337	-0.1048	-1.6581
-0.0235	0.9625	-0.1618	-0.0001	0.0196	0.0199	0.0942	-0.0084	-0.2406	-1.2839
0.0000	0.9535	-0.1646	-0.0208	0.0201	0.0198	0.0949	-0.0100	-0.2043	-1.2111
0.0235	0.9524	-0.1667	-0.0306	0.0225	0.0237	0.1096	-0.0033	-0.2646	-1.5966
0.0471	0.9430	-0.1626	-0.0502	0.0250	0.0253	0.1156	-0.0419	-0.2851	-1.6337
0.0706	0.9290	-0.1494	-0.0713	0.0276	0.0298	0.1245	-0.1052	-0.2914	-1.7009
0.0941	0.9136	-0.1281	-0.0944	0.0288	0.0333	0.1328	-0.1639	-0.3601	-1.8448
0.1412	0.8974	-0.0549	-0.2079	0.0341	0.0377	0.1540	-0.1526	-0.7564	-2.7592
0.1647	0.9038	-0.0197	-0.2877	0.0359	0.0344	0.1597	-0.0629	-0.6501	-2.9645
0.1882	0.9191	0.0215	-0.3493	0.0345	0.0324	0.1430	-0.0627	-0.3450	-1.8998
0.2118	0.9408	0.0511	-0.3498	0.0304	0.0294	0.1353	-0.0450	-0.2310	-1.2710
0.2353	0.9596	0.0786	-0.3301	0.0254	0.0258	0.1192	-0.0073	-0.1116	-0.8856
0.2824	0.9698	0.1158	-0.2771	0.0219	0.0235	0.1007	-0.0196	-0.2066	-1.3608
0.3294	0.9678	0.1364	-0.2443	0.0217	0.0220	0.1076	0.0146	-0.2923	-1.7114
0.3765	0.9723	0.1483	-0.2132	0.0216	0.0221	0.1016	-0.0021	-0.3230	-1.5573
0.4235	0.9756	0.1578	-0.1879	0.0208	0.0179	0.0978	0.0311	-0.2696	-1.5780
0.4706	0.9767	0.1630	-0.1733	0.0196	0.0173	0.0932	0.0327	-0.3188	-1.3759
0.5176	0.9775	0.1666	-0.1617	0.0199	0.0189	0.0964	0.0081	-0.2343	-1.4311
0.5647	0.9768	0.1668	-0.1438	0.0210	0.0185	0.1006	0.0341	-0.3093	-1.5293
0.6118	0.9829	0.1695	-0.1357	0.0201	0.0193	0.0970	0.0113	-0.3428	-1.4447
0.6588	0.9833	0.1703	-0.1235	0.0210	0.0204	0.1013	0.0189	-0.3068	-1.5528
0.7059	0.9815	0.1721	-0.1165	0.0229	0.0197	0.1109	0.0262	-0.4119	-2.0454

Run#: 096	M = 0.800	U_∞ 261.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 6950	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.3765	0.9805	0.0942	0.2416	0.0225	0.0188	0.1091	0.0376	-0.4053	-2.0969
-0.3294	0.9738	0.0780	0.2262	0.0208	0.0195	0.1000	0.0206	-0.3733	-1.6131
-0.2824	0.9494	0.0591	0.2182	0.0271	0.0223	0.1212	0.0473	-0.1337	-1.5944
-0.2353	0.8552	0.0145	0.2000	0.0447	0.0295	0.1886	0.2053	0.2799	1.5575
-0.1882	0.7785	-0.0511	0.1435	0.0361	0.0331	0.1500	0.0436	0.1128	-0.0021
-0.1412	0.7692	-0.1040	0.0808	0.0328	0.0341	0.1407	-0.1413	-0.1961	-1.1459
-0.0941	0.8676	-0.1480	0.0736	0.0561	0.0311	0.2056	-0.0303	-0.2410	-1.3407
-0.0471	0.9610	-0.1626	0.0512	0.0241	0.0198	0.1135	0.0157	-0.2964	-1.6468
-0.0235	0.9618	-0.1675	0.0475	0.0209	0.0187	0.0992	-0.0004	-0.1864	-1.3946
0.0000	0.9566	-0.1769	0.0442	0.0213	0.0196	0.0999	0.0078	-0.2711	-1.4883
0.0235	0.9448	-0.1836	0.0584	0.0229	0.0232	0.1080	-0.0184	-0.2693	-1.6268
0.0471	0.9316	-0.1852	0.0632	0.0265	0.0241	0.1229	-0.0170	-0.4481	-2.0131
0.0706	0.9154	-0.1759	0.0774	0.0286	0.0279	0.1366	-0.0591	-0.3826	-2.0981
0.0941	0.8849	-0.1577	0.0626	0.0302	0.0306	0.1379	-0.0784	-0.4500	-1.7977
0.1176	0.8620	-0.1355	0.0309	0.0344	0.0345	0.1515	-0.1765	-0.5370	-2.0220
0.1412	0.8387	-0.1036	-0.0222	0.0353	0.0383	0.1588	-0.1781	-0.1794	-1.8039
0.1647	0.8305	-0.0639	-0.1015	0.0390	0.0408	0.1782	-0.0539	-0.9859	-3.2573
0.1882	0.8313	-0.0189	-0.1820	0.0449	0.0411	0.1936	-0.0334	-0.9581	-5.1120
0.2118	0.8563	0.0278	-0.3199	0.0479	0.0389	0.2174	0.0936	-1.5106	-6.4607
0.2235	0.8848	0.0507	-0.3583	0.0481	0.0346	0.2069	0.1472	-1.0980	-4.9812
0.2353	0.9020	0.0755	-0.4075	0.0416	0.0325	0.1830	0.0743	-0.4355	-2.0985
0.2588	0.9430	0.1044	-0.3727	0.0346	0.0282	0.1607	0.0313	-0.0921	-0.0408
0.2824	0.9700	0.1270	-0.2926	0.0257	0.0233	0.1228	0.0064	-0.2683	-0.7579
0.3059	0.9721	0.1390	-0.2518	0.0218	0.0206	0.1071	0.0272	-0.2763	-1.2392
0.3294	0.9787	0.1499	-0.2330	0.0206	0.0183	0.0980	0.0325	-0.2768	-1.4025
0.3529	0.9811	0.1554	-0.2235	0.0219	0.0193	0.1045	0.0279	-0.2704	-1.6359
0.3765	0.9809	0.1586	-0.2027	0.0233	0.0191	0.1104	0.0298	-0.3163	-1.9613
0.4000	0.9811	0.1621	-0.1928	0.0229	0.0191	0.1093	0.0369	-0.3543	-1.9241
0.4235	0.9837	0.1660	-0.1788	0.0201	0.0174	0.0983	0.0200	-0.2880	-1.4832
0.4471	0.9808	0.1680	-0.1680	0.0204	0.0162	0.0975	0.0232	-0.2823	-1.5256
0.4706	0.9844	0.1707	-0.1555	0.0203	0.0187	0.0940	0.0017	-0.2161	-1.5111
0.5176	0.9865	0.1733	-0.1407	0.0203	0.0204	0.0957	-0.0009	-0.2858	-1.5086
0.5647	0.9862	0.1750	-0.1267	0.0201	0.0203	0.0960	0.0032	-0.3135	-1.5114
0.5882	0.9855	0.1744	-0.1200	0.0203	0.0240	0.0942	-0.0481	-0.2004	-1.4763

Run#: 097	M = 0.800	U∞=261.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 6950	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.3294	0.9734	0.0846	0.2372	0.0210	0.0204	0.1011	-0.0065	-0.2385	-1.5640
-0.3059	0.9608	0.0737	0.2451	0.0254	0.0231	0.1192	0.0340	-0.3861	-2.0102
-0.2824	0.9363	0.0632	0.2410	0.0302	0.0242	0.1448	0.0749	-0.2017	-1.4321
-0.2588	0.8995	0.0472	0.2437	0.0375	0.0260	0.1741	0.1640	-0.0318	-0.4330
-0.2353	0.8295	0.0151	0.2072	0.0474	0.0303	0.2027	0.3178	0.4276	2.3590
-0.2118	0.7515	-0.0280	0.1062	0.0374	0.0321	0.1643	0.1348	0.0288	-0.2663
-0.1882	0.7230	-0.0574	0.0975	0.0345	0.0334	0.1429	-0.0563	0.1073	-1.1373
-0.1647	0.7148	-0.0873	0.0835	0.0316	0.0346	0.1385	-0.0962	-0.0021	-0.9271
-0.1412	0.7374	-0.1120	0.0985	0.0468	0.0365	0.1669	-0.2260	-0.1408	-0.5054
-0.1176	0.7977	-0.1304	0.0767	0.0607	0.0400	0.2116	-0.2856	0.1080	-2.4567
-0.0941	0.8652	-0.1474	0.0419	0.0535	0.0360	0.1871	-0.1993	-0.1927	-1.4446
-0.0706	0.9117	-0.1582	0.0187	0.0398	0.0309	0.1547	-0.1009	-0.0132	-0.5615
-0.0471	0.9357	-0.1620	0.0143	0.0301	0.0245	0.1278	0.0148	-0.1272	-0.4689
-0.0235	0.9518	-0.1705	0.0492	0.0255	0.0251	0.1130	-0.0631	-0.0780	-0.8806
0.0000	0.9507	-0.1767	0.0865	0.0225	0.0245	0.1023	-0.0450	-0.2023	-1.1726
0.0235	0.9448	-0.1856	0.1120	0.0223	0.0240	0.1015	-0.0532	-0.1024	-1.2808
0.0471	0.9265	-0.1904	0.1397	0.0243	0.0255	0.1130	-0.0725	-0.1752	-1.5863
0.0706	0.9037	-0.1879	0.1643	0.0278	0.0295	0.1277	-0.0866	-0.1628	-1.5137
0.0941	0.8790	-0.1813	0.1634	0.0291	0.0317	0.1349	-0.1135	-0.1803	-1 1523
0.1176	0.8498	-0.1616	0.1394	0.0322	0.0370	0.1493	-0.1934	0.0323	-1.0406
0.1412	0.8216	-0.1387	0.1138	0.0349	0.0395	0.1589	-0.1736	-0.1734	-1.4455
0.1647	0.7995	-0.1040	0.0538	0.0358	0.0426	0.1624	-0.2286	-0.3104	-1.7994
0.1882	0.7864	-0.0570	-0.0496	0.0392	0.0464	0.1793	-0.1205	-1.0803	-2.5900
0.2118	0.7884	-0.0056	-0.1555	0.0466	0.0490	0.2097	0.0317	-1.5737	-5.1024
0.2235	0.7998	0.0177	-0.2184	0.0519	0.0496	0.2204	0.1997	-1.8339	-6.7549
0.2353	0.8303	0.0503	-0.2812	0.0575	0.0458	0.2452	0.3878	-2.3318	-8.3614
0.2471	0.8550	0.0747	-0.3786	0.0537	0.0434	0.2412	0.3079	-1.7548	-6.3427
0.2588	0.8958	0.1047	-0.3958	0.0505	0.0372	0.2359	0.1879	-0.6587	-3.8143
0.2824	0.9502	0.1356	-0.3342	0.0350	0.0277	0.1603	0.0735	-0.0642	0.2249
0.3059	0.9774	0.1554	-0.2542	0.0230	0.0224	0.1085	-0.0013	-0.2322	-1.0098
0.3294	0.9785	0.1406	-0.2248	0.0196	0.0199	0.0936	0.0007	-0.2080	-1.1104
0.3765	0.9862	0.1695	-0.1934	0.0194	0.0193	0.0917	0.0087	-0.2150	-1.2951
0.4235	0.9838	0.1727	-0.1706	0.0192	0.0192	0.0899	-0.0011	-0.2272	-1.3737

Run#: 100	M = 0.800	U_∞=259.4 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 6950	Y = 0.141 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty{}^2}$	$\frac{1000*\overline{V'W'}}{U_\infty{}^2}$	$\frac{1000*\overline{W'U'}}{U_\infty{}^2}$
0.0000	0.9926	-0.0944	-0.0049	0.0212	0.0246	0.1019	-0.0187	-0.3611	-1.8124
0.0471	0.9939	-0.0919	-0.0527	0.0198	0.0242	0.0936	-0.0423	-0.2662	-1.5727
0.0941	0.9976	-0.0757	-0.1175	0.0219	0.0270	0.1058	-0.0442	-0.3358	-2.0391
0.1412	1.0006	-0.0480	-0.1716	0.0202	0.0263	0.0950	-0.0361	-0.3434	-1.6443
0.3765	0.9906	0.1285	-0.1503	0.0235	0.0253	0.1146	-0.0198	-0.3890	-2.2270
0.4235	0.9936	0.1435	-0.1294	0.0243	0.0326	0.1153	-0.0559	-0.4631	-2.1907
0.4706	0.9915	0.1520	-0.1096	0.0234	0.0317	0.1117	-0.0836	-0.2895	-2.0721

Run#: 101	M = 0.800	U∞=260.4 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 6950	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	0.9917	0.1431	0.2160	0.0240	0.0238	0.1167	-0.0148	-0.3572	-2.1748
-0.3294	0.9853	0.1157	0.2075	0.0224	0.0255	0.1039	-0.0410	-0.3904	-1.7856
-0.2353	0.9766	0.0791	0.2116	0.0217	0.0282	0.0993	-0.0815	-0.3147	-1.5770
-0.1882	0.9656	0.0539	0.2688	0.0254	0.0278	0.1225	-0.0103	-0.4707	-2.0926
-0.1412	0.9319	0.0212	0.2359	0.0404	0.0413	0.1401	0.3816	-0.3979	-1.9729
-0.0941	0.8866	-0.0383	0.1925	0.0438	0.0475	0.1788	-0.0984	0.5616	-1.2104
-0.0471	0.8888	-0.0880	0.0490	0.0575	0.0430	0.2082	-0.7577	1.7389	-5.1115
0.0000	0.9483	-0.1182	0.0041	0.0553	0.0352	0.1733	-0.4834	0.5014	-2.5223
0.0471	0.9849	-0.1245	0.0133	0.0239	0.0273	0.1024	-0.0784	-0.1499	-1.7029
0.0941	0.9785	-0.1295	-0.0349	0.0231	0.0291	0.1039	-0.0267	-0.2933	-1.5751
0.1412	0.9690	-0.1130	-0.0968	0.0292	0.0338	0.1343	-0.0378	-0.4103	-2.5855
0.1882	0.9627	-0.0571	-0.1998	0.0303	0.0449	0.1367	-0.1390	-1.1254	-2.1957
0.2118	0.9701	-0.0235	-0.2586	0.0305	0.0445	0.1199	-0.0578	-0.7991	-1.8356
0.2353	0.9720	0.0165	-0.2902	0.0274	0.0393	0.1194	-0.0648	-0.6551	-1.5751
0.2824	0.9889	0.0759	-0.2750	0.0242	0.0341	0.1064	0.0539	-0.3679	-1.2928
0.3294	0.9898	0.1208	-0.2417	0.0236	0.0299	0.1110	0.0471	-0.2257	-1.5647
0.3765	0.9917	0.1499	-0.2066	0.0241	0.0272	0.1069	0.0099	-0.1756	-1.5461
0.4235	0.9909	0.1781	-0.1553	0.0218	0.0232	0.1004	-0.0046	-0.2600	-1.3537
0.5647	1.0052	0.1904	-0.1042	0.0186	0.0178	0.0844	-0.0012	-0.2036	-1.0572

Run.#: 136	M = 0.800	U_∞ 262.0 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 6950	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty\hat{}2}$	$\frac{1000*\overline{V'W'}}{U_\infty\hat{}2}$	$\frac{1000*\overline{W'U'}}{U_\infty\hat{}2}$
0.0117	0.6494	-0.1037	0.1154	0.0779	0.0992	0.2391	-1.7498	3.4414	2.0234
0.0176	0.7154	-0.1177	0.0805	0.0771	0.0889	0.2655	-0.9222	0.6195	4.7373
0.0235	0.7838	-0.1351	0.1140	0.0709	0.0513	0.2710	-0.6635	0.1822	5.5086
0.0294	0.8362	-0.1432	0.0866	0.0603	0.0422	0.2508	-0.3453	0.2495	4.7899
0.0353	0.9084	-0.1468	0.1344	0.0542	0.0413	0.2011	-0.1459	0.1772	1.7779
0.0412	0.9538	-0.1455	0.1536	0.0440	0.0371	0.1462	0.1359	0.4670	0.6436
0.0471	0.9763	-0.1448	0.1684	0.0349	0.0352	0.1197	0.0882	0.3773	-0.6311
0.0529	0.9885	-0.1471	0.1608	0.0277	0.0332	0.1085	0.0217	0.3381	-0.9161
0.0588	0.9988	-0.1477	0.1543	0.0228	0.0301	0.1011	0.0588	0.0600	-1.2253
0.0647	1.0000	-0.1482	0.1537	0.0210	0.0306	0.1008	0.0421	0.1914	-1.3039
0.0706	1.0035	-0.1486	0.1451	0.0204	0.0292	0.0965	0.0164	0.1558	-1.3003
0.0824	1.0026	-0.1414	0.1435	0.0199	0.0300	0.0971	0.0117	0.1200	-1.3030
0.0941	1.0039	-0.1387	0.1449	0.0201	0.0303	0.0964	0.0300	0.0400	-1.2997
0.1176	1.0010	-0.1303	0.1277	0.0204	0.0295	0.0959	0.0202	-0.1246	-1.3170

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
152	0.8	20	BLUNT	0	5.00	-60	Y
164	0.8	20	BLUNT	0	5.00	0	Y
165	0.8	20	BLUNT	0	5.00	0	Y
166	0.8	20	BLUNT	0	5.00	0	Y

Run#: 157	M 0.300	U∞ 261.6 m/s
NOSE:BLUNT	X 5.000 cal	α = 20 °
RPM : 0000	Z 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0176	0.7443	0.0060	0.5710	0.1713	0.0680	0.7608	-0.9342	28.3974	-70.2717
0.0235	0.9052	0.0024	0.0550	0.1474	0.0495	0.4813	-0.5192	10.2922	-40.1283
0.0471	1.0454	0.0103	-0.1876	0.0415	0.0246	0.1784	-0.2865	1.6161	-5.8790
0.0706	1.0457	0.0118	-0.1922	0.0234	0.0229	0.1079	-0.1101	0.6295	-1.9155
0.0941	1.0505	0.0152	-0.1881	0.0234	0.0232	0.1137	-0.1361	0.7856	-1.9980
0.1176	1.0481	0.0155	-0.1748	0.0240	0.0242	0.1110	-0.1365	0.6206	-2.0106

Run.#: 164	M = 0.800	U_∞=263.3 m/s
NOSE:BLUNT	X = 5.000 cal	α 20
RPM : 0000	Z = 6.000 cal	δ 0

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0471	1.0508	-0.0971	-0.0338	0.0289	0.0366	0.1492	-0.0709	0.7955	-1.6826
0.0706	1.0514	-0.1529	-0.0059	0.0291	0.0358	0.1510	-0.0228	0.4451	-2.1098
0.0941	1.0498	-0.1904	0.0085	0.0296	0.0353	0.1422	0.0011	0.1314	-2.3406
0.1176	1.0513	-0.2110	0.0186	0.0289	0.0357	0.1280	-0.1194	-0.3556	-2.2243
0.1412	1.0487	-0.2308	0.0522	0.0269	0.0393	0.1135	-0.2572	-0.4201	-1.2784
0.1882	1.0406	-0.2081	0.0660	0.0284	0.0360	0.1192	-0.1943	-0.7719	-1.4802
0.2824	1.0273	-0.0840	0.0613	0.0287	0.0361	0.1287	-0.2924	0.2210	-1.7296
0.3765	1.0072	0.0335	0.0503	0.0269	0.0307	0.1162	-0.1347	-0.1421	-1.5253
0.4706	0.9921	0.1153	0.0434	0.0248	0.0320	0.1072	-0.2187	-0.1146	-1.2998
0.5647	0.9799	0.1792	0.0433	0.0273	0.0305	0.1189	-0.1222	-0.4890	-1.9158
0.6588	0.9689	0.2129	0.0330	0.0264	0.0306	0.1189	-0.1278	-0.6113	-1.9861

Run#: 265	M = 0.866	U∞ = 262.8 m/s
BOUNDARY LAYER	X = 5.000 cm	α = 2°
RPM : 6300	Z = 0.075 cm	δ = 0°

	VELOCITY			RMS			SHEAR STRESS		
Y/δ	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0353	1.0415	-0.0720	0.2129	0.0295	0.0412	0.1427	-0.2039	-1.8602	-1.0483
0.0471	1.0462	-0.1416	0.1656	0.0287	0.0427	0.1423	-0.3290	-1.7815	-0.7606
0.0941	1.0443	-0.2096	0.1141	0.0277	0.0408	0.1243	-0.4025	-1.1795	-0.8566
0.1412	1.0473	-0.2507	0.0544	0.0293	0.0456	0.1136	-0.4704	-0.6059	-1.3754
0.1882	1.0372	-0.2276	0.0038	0.0293	0.0458	0.1299	-0.4630	0.3485	-1.7592
0.2353	1.0322	-0.1712	-0.0567	0.0283	0.0397	0.1373	-0.3731	0.2385	-1.8880
0.2824	1.0299	-0.0910	-0.0768	0.0265	0.0365	0.1352	-0.2180	-0.6131	-1.9297
0.3765	1.0096	0.0322	-0.0311	0.0260	0.0314	0.1269	-0.1687	-0.4743	-1.9890
0.4706	0.9942	0.1175	-0.0242	0.0254	0.0306	0.1162	-0.1267	-0.5743	-1.7889
0.5647	0.9815	0.1747	0.0018	0.0249	0.0290	0.1137	-0.0993	-0.7733	-1.6947
0.6588	0.9782	0.2149	0.0029	0.0258	0.0305	0.1154	-0.1418	-0.5278	-1.8163

Run#: [illegible]		M	0.806	U_∞ 262.6 m/s	
NOSE: PLUNI		X	5.056 cal	α	20 °
RPM : 0000		Z	0.141 cal	δ	0 °

Y (Cal)	VELOCITY			RMS			SHEAR STRESS		
	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0471	1.0431	-0.1318	0.3325	0.0312	0.0587	0.1985	-0.6923	-7.0571	0.4899
0.0941	1.0254	-0.2098	0.1330	0.0307	0.0495	0.1504	-0.3172	-3.0741	-1.8338
0.1412	1.0218	-0.2384	0.0553	0.0349	0.0495	0.1517	-0.3625	-1.4052	-1.9647
0.1882	1.0214	-0.2186	-0.0302	0.0335	0.0520	0.1543	-0.5478	0.0320	-2.2703
0.2353	1.0234	-0.1573	-0.1207	0.0343	0.0447	0.1820	-0.2107	-1.8611	-3.1664
0.2824	1.0167	-0.0622	-0.2102	0.0278	0.0422	0.1595	-0.1048	-2.9348	-2.3105
0.3294	1.0081	0.0105	-0.1709	0.0254	0.0369	0.1383	-0.0244	-2.0840	-2.1328
0.3765	0.937[illegible]	0.0573	-0.1310	0.0252	0.0353	0.1260	-0.1203	-1.5370	-1.8982
0.4235	0.9963	0.0996	-0.1091	0.0243	0.0342	0.1201	-0.1198	-1.1626	-1.7243
0.4706	0.9904	0.1320	-0.0848	0.0242	0.0330	0.1195	-0.0820	-1.2960	-1.8576
0.5647	0.9776	0.1818	-0.0512	0.0250	0.0295	0.1119	-0.1233	-0.7026	-1.8046
0.6588	0.9736	0.2159	-0.0324	0.0251	0.0316	0.1172	-0.1027	-0.9920	-1.9953

Run	Mach	Alpha (deg)	Name	Spin (RPM)	X Cell	Delta (deg)	Conv.
11	1.2	0	FLUNT	0	4.50	0	Y
12	1.2	0	FLUNT	0	5.00	0	Y
13	1.2	0	FLUNT	0	5.50	0	Y
14	1.2	0	FLUNT	0	5.75	0	Y

[illegible]	M [illegible]	[illegible]	
[illegible]	X [illegible]	α [illegible]	
[illegible]	Z [illegible]	δ [illegible]	

	MEAN VELOCITY			RMS			REYNOLDS STRESS		
Y/δ	$\frac{U}{U_\infty}$	$\frac{V}{U_\infty}$	$\frac{W}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0047	0.8266	-0.0033	-0.0068	0.0671	0.0313	0.1210	-0.3627	0.2673	-1.9286
0.0071	0.8295	0.0026	-0.0124	0.0708	0.0351	0.1802	-0.7397	0.6577	-3.7073
0.0094	0.8374	0.0052	0.0199	0.0689	0.0347	0.1931	-0.5416	0.1142	-4.2459
0.0118	0.8552	0.0051	0.0200	0.0665	0.0330	0.2139	-0.2869	0.3025	-4.5920
0.0176	0.9010	-0.0017	0.0362	0.0578	0.0297	0.2415	-0.2604	0.5576	-7.1922
0.0235	0.9574	0.0038	-0.0202	0.0366	0.0257	0.1452	-0.1505	0.2794	-1.5145
0.0294	0.9981	0.0070	-0.0255	0.0267	0.0190	0.1110	-0.0789	0.2102	-1.4837
0.0353	1.0175	0.0082	-0.0055	0.0220	0.0164	0.0990	0.0006	0.0377	-1.7072
0.0412	1.0209	0.0105	0.0005	0.0204	0.0157	0.0909	0.0089	-0.0344	-1.5047
0.0471	1.0258	0.0088	-0.0040	0.0176	0.0129	0.0873	-0.0043	0.0055	-1.2932
0.0588	1.0227	0.0070	0.0001	0.0201	0.0144	0.0961	-0.0227	0.1196	-1.6754
0.0706	1.0269	0.0084	-0.0050	0.0186	0.0142	0.0870	0.0013	0.0464	-1.3801
0.0941	1.0248	0.0065	-0.0027	0.0176	0.0147	0.0829	-0.0038	0.0370	-1.2326
0.1176	1.0237	0.0056	0.0014	0.0174	0.0134	0.0798	-0.0188	0.0900	-1.1671

Run#: 012	M = 1.200	U∞=368.9 m/s
NOSE:BLUNT	X = 5.000 cal	α = 0 °
RPM : 0000	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0035	0.9391	-0.0976	0.0678	0.0420	0.0317	0.1927	-0.2018	1.0969	-2.6430
0.0118	0.9858	-0.0941	0.0836	0 0397	0.0355	0.1879	-0.2001	0.6377	-2.0552
0.0235	1.0368	-0.0842	0.0362	0.0343	0.0294	0.1632	-0.0601	0.5320	-1.6173
0.0294	1.0508	-0.0710	0.0555	0.0305	0.0282	0.1395	-0.1175	0.4698	-1.8071
0.0353	1.0605	-0.0614	0.0261	0.0245	0.0244	0.1192	-0.0688	0.1811	-1.8137
0.0471	1.0590	-0.0364	0.0049	0.0202	0.0182	0.0997	-0.0283	0.1402	-1.6364
0.0588	1.0489	-0.0218	0.0091	0.0176	0.0164	0.0892	-0.0023	0.0626	-1.3280
0.0706	1.0412	-0.0140	0.0039	0.0180	0.0155	0.0857	0.0136	-0.0402	-1.3713
0.0941	1.0351	-0.0065	-0.0083	0.0176	0.0132	0.0858	0.0108	-0.0303	-1.3618
0.1176	1.0283	0.0001	-0.0005	0.0177	0.0135	0.0848	-0.0012	0.0627	-1.3369

Run#: 013	M = 1.200	U∞=368.9 m/s
NOSE:BLUNT	X = 5.500 cal	α = 0 °
RPM : 0000	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0118	0.9352	-0.1164	-0.0121	0.0316	0.0264	0.1506	-0.0100	0.0724	-1.9715
0.0176	0.9704	-0.1218	0.0175	0.0327	0.0225	0.1587	-0.0064	0.1563	-1.7780
0.0235	1.0095	-0.1206	0.0002	0.0302	0.0228	0.1343	-0.0955	0.2093	-2.6316
0.0353	1.0687	-0.1201	0.0439	0.0230	0.0179	0.1112	0.0085	0.0794	-2.1116
0.0471	1.0969	-0.1188	-0.0189	0.0221	0.0150	0.1027	0.0052	-0.0040	-1.7586
0.0588	1.1014	-0.1174	-0.0352	0.0204	0.0151	0.1016	-0.0115	0.0606	-1.9644
0.0706	1.1090	-0.1130	0.0048	0.0205	0.0139	0.0978	-0.0153	0.0671	-1.8290
0.0824	1.0985	-0.1153	-0.0335	0.0205	0.0144	0.0994	-0.0015	-0.0260	-1.9226
0.0941	1.0991	-0.1146	-0.0550	0.0177	0.0109	0.0777	0.0950	-0.4774	-1.3646
0.1059	1.1006	-0.1107	-0.0360	0.0196	0.0173	0.0943	0.0023	-0.0051	-1.7834
0.1176	1.1109	-0.1090	0.0004	0.0192	0.0130	0.0953	-0.0113	0.0790	-1.6844
0.2353	1.1136	-0.1002	0.0051	0.0203	0.0165	0.0985	0.0030	0.0135	-1.7479

Run#: 014	M = 1.200	U∞=370.2 m/s
NOSE:BLUNT	X = 5.750 cal	α = 0 °
RPM : 0000	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0047	0.8040	-0.1009	0.0304	0.0501	0.0397	0.2552	-0.0833	1.9461	-3.2611
0.0059	0.8685	-0.1120	-0.0012	0.0390	0.0349	0.1862	-0.1273	0.0945	-0.8429
0.0118	0.9135	-0.1127	-0.0090	0.0338	0.0310	0.1552	0.0361	0.0185	-0.9973
0.0176	0.9550	-0.1146	-0.0138	0.0304	0.0299	0.1412	0.0575	-0.2419	-1.0162
0.0235	0.9880	-0.1167	-0.0259	0.0280	0.0283	0.1290	0.0076	-0.1912	-1.0244
0.0353	1.0358	-0.1197	-0.0355	0.0248	0.0244	0.1212	0.0290	-0.0673	-1.1982
0.0471	1.0704	-0.1165	-0.0322	0.0195	0.0219	0.0948	-0.0010	-0.0225	-1.1986
0.0588	1.0848	-0.1149	-0.0175	0.0183	0.0177	0.0880	0.0191	-0.0457	-1.2786
0.0824	1.0874	-0.1123	-0.0170	0.0201	0.0162	0.0952	-0.0007	-0.0162	-1.5627
0.1059	1.0872	-0.1090	-0.0167	0.0170	0.0155	0.0819	-0.0090	0.0207	-1.0201
0.1482	1.0891	-0.0976	-0.0220	0.0174	0.0162	0.0849	0.0138	0.0022	-1.1092
0.1647	1.0880	-0.1025	-0.0160	0.0179	0.0154	0.0860	0.0056	-0.0070	-1.1858

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
18	1.2	0	BLUNT	9830	4.50	0	Y
17	1.2	0	BLUNT	9830	5.00	0	Y
16	1.2	0	BLUNT	9830	5.50	0	Y
15	1.2	0	BLUNT	9830	5.75	0	Y

Run#: 018	M = 1.200	U∞=368.2 m/s
NOSE:BLUNT	X = 4.500 cal	α = 0 °
REM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0059	0.8330	0.0078	0.1174	0.0424	0.0405	0.1831	0.2480	-0.4986	-3.2701
0.0118	0.8959	-0.0014	0.0730	0.0348	0.0372	0.1686	0.0131	0.1762	-1.5902
0.0176	0.9446	-0.0004	0.0383	0.0301	0.0325	0.1384	-0.0397	0.0710	-0.9957
0.0235	0.9796	0.0046	0.0192	0.0260	0.0316	0.1183	-0.0728	0.1345	-1.4312
0.0294	1.0038	0.0050	0.0057	0.0191	0.0339	0.0940	0.0203	-0.2806	-0.8986
0.0353	1.0123	0.0084	0.0092	0.0185	0.0291	0.0888	-0.0187	0.1629	-1.1122
0.0471	1.0182	0.0067	0.0094	0.0178	0.0272	0.0814	-0.0138	-0.0015	-1.0662
0.0706	1.0193	0.0075	0.0065	0.0166	0.0258	0.0823	0.0157	0.0689	-1.0105
0.1176	1.0190	0.0072	0.0137	0.0179	0.0263	0.0847	0.0084	0.0187	-1.1777
0.1765	1.0215	0.0072	0.0236	0.0195	0.0250	0.0925	0.0004	-0.0292	-1.5185

Run#: 017	M = 1.200	U∞ 368.2 m/s
NOSE:BLUNT	X = 5.000 cal	α = 0 °
RPM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0035	0.9205	-0.0750	0.0948	0.0512	0.0392	0.1428	-0.5974	1.0858	-2.7856
0.0071	0.9694	-0.0992	0.1111	0.0402	0.0373	0.1807	-0.2373	0.6058	-3.1721
0.0118	1.0009	-0.0921	0.0839	0.0350	0.0348	0.1687	-0.1262	0.1981	-1.7491
0.0176	1.0248	-0.0851	0.0572	0.0313	0.0354	0.1491	-0.0487	0.1412	-1.3417
0.0235	1.0454	-0.0766	0.0421	0.0277	0.0329	0.1359	-0.0250	0.1351	-1.2979
0.0294	1.0580	-0.0634	0.0466	0.0251	0.0316	0.1152	-0.0233	0.2007	-1.6529
0.0353	1.0646	-0.0528	0.0279	0.0223	0.0293	0.1019	-0.0056	0.1680	-1.3886
0.0471	1.0611	-0.0341	0.0167	0.0196	0.0268	0.0969	-0.0072	0.0841	-1.5270
0.0588	1.0484	-0.0196	0.0289	0.0188	0.0243	0.0893	-0.0153	-0.0095	-1.3739
0.0706	1.0425	-0.0117	0.0251	0.0190	0.0242	0.0904	-0.0060	0.0350	-1.5144
0.0941	1.0345	-0.0056	0.0172	0.0178	0.0239	0.0867	-0.0157	0.0820	-1.3222
0.1176	1.0291	-0.0009	0.0164	0.0183	0.0249	0.0892	-0.0176	0.1122	-1.3932
0.1765	1.0222	0.0027	0.0113	0.0185	0.0241	0.0874	0.0077	-0.0261	-1.3210

Run#: 016	M = 1.200	U∞=368.2 m/s
NOSE:BLUNT	X = 5.500 cal	α = 0 °
RPM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0035	0.9213	-0.1192	0.0273	0.0506	0.0353	0.1189	-0.6405	0.4494	-2.3968
0.0059	0.9403	-0.1200	0.0410	0.0462	0.0375	0.1292	-0.6731	0.9326	-2.7601
0.0118	0.9737	-0.1188	0.0176	0.0376	0.0350	0.1127	-0.4787	0.5769	-1.9696
0.0176	1.0070	-0.1218	0.0164	0.0420	0.0320	0.1098	-0.5982	0.5355	-2.1863
0.0235	1.0441	-0.1216	-0.0057	0.0376	0.0312	0.1229	-0.3380	0.3826	-2.1864
0.0353	1.0887	-0.1246	0.0036	0.0243	0.0253	0.0984	-0.0242	-0.0030	-1.5929
0.0471	1.0963	-0.1200	-0.0299	0.0201	0.0246	0.0924	-0.0577	0.1902	-1.5691
0.0588	1.0954	-0.1131	-0.0216	0.0202	0.0200	0.0981	0.0014	0.0501	-1.9346
0.0706	1.1119	-0.1140	-0.0050	0.0199	0.0185	0.0935	0.0002	-0.0197	-1.7141
0.0824	1.1120	-0.1127	-0.0036	0.0199	0.0195	0.0956	-0.0151	0.0676	-1.7501
0.0941	1.1109	-0.1106	0.0029	0.0192	0.0189	0.0921	-0.0197	0.0532	-1.6254
0.1176	1.1145	-0.1097	-0.0002	0.0197	0.0186	0.0939	-0.0109	0.0686	-1.7047
0.1765	1.1145	-0.1056	0.0059	0.0193	0.0191	0.0952	-0.0125	0.0577	-1.7146

Run#: 015	M = 1.200	U∞ = 370.2 m/s
NOSE: BLUNT	X = 5.750 cal	α = 0 °
RPM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0024	0.8337	-0.1096	0.0411	0.0673	0.0393	0.1418	-1.3025	1.4293	-2.6470
0.0059	0.8655	-0.1116	0.0354	0.0612	0.0393	0.1517	-0.9625	0.5086	-3.2413
0.0118	0.9083	-0.1157	0.0435	0.0524	0.0392	0.1361	-0.7251	0.0296	-2.9032
0.0235	0.9798	-0.1174	0.0031	0.0455	0.0308	0.1068	-0.6115	0.4693	-1.8293
0.0294	0.9431	-0.1145	0.0080	0.0362	0.0204	0.1577	-0.0145	0.1749	-1.3943
0.0353	0.9818	-0.1164	-0.0136	0.0321	0.0201	0.1413	-0.0510	0.1340	-1.4166
0.0471	1.0685	-0.1211	-0.0202	0.0271	0.0217	0.0943	-0.0982	0.0251	-1.5709
0.0588	1.0685	-0.1160	-0.0329	0.0217	0.0169	0.1027	-0.0066	0.0163	-1.3140
0.0706	1.0845	-0.1156	-0.0220	0.0201	0.0145	0.0957	-0.0028	0.0155	-1.4170
0.0941	1.0879	-0.1164	-0.0233	0.0190	0.0192	0.0875	0.0166	-0.0423	-1.4421
0.1176	1.0872	-0.1113	-0.0203	0.0183	0.0181	0.0847	0.0075	0.0188	-1.3412
0.1765	1.0892	-0.1023	-0.0068	0.0183	0.0142	0.0923	-0.0052	0.0554	-1.3797
0.2353	1.0893	-0.0977	-0.0051	0.0188	0.0145	0.0935	0.0074	0.0022	-1.4071

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scar
19	1.2	0	SHARP	0	4.50	0	Y
20	1.2	0	SHARP	0	5.00	0	Y
21	1.2	0	SHARP	0	5.50	0	Y

Run#: 015	M 1.200	U∞ 357.9 m/s
NOSE:SHARP	X 4.500 cal	α 0 °
RM : 0050	Z 0.000 cal	β 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0047	0.7814	-0.0062	0.0166	0.0754	0.0372	0.1272	-1.2059	0.2599	-1.4072
0.0118	0.8692	-0.0029	0.0159	0.0666	0.0354	0.1074	-0.9138	0.4022	-1.7908
0.0176	0.9370	0.0005	0.0072	0.0520	0.0316	0.0899	-0.7032	0.3482	-1.7656
0.0235	0.9796	0.0011	-0.0069	0.0394	0.0244	0.0862	-0.2647	0.0957	-0.8961
0.0294	1.0036	0.0028	0.0128	0.0303	0.0246	0.0843	-0.0951	-0.0612	-1.6594
0.0353	1.0212	0.0050	0.0076	0.0223	0.0224	0.0852	-0.0297	0.0490	-1.3925
0.0412	1.0292	0.0056	-0.0050	0.0206	0.0222	0.0864	-0.0068	0.0189	-1.4494
0.0471	1.0304	0.0050	0.0011	0.0189	0.0182	0.0861	0.0047	0.0117	-1.3809
0.0706	1.0318	0.0040	0.0034	0.0190	0.0178	0.0857	0.0110	0.0510	-1.3993
0.0941	1.0313	0.0039	0.0109	0.0192	0.0176	0.0864	0.0280	-0.1191	-1.4456
0.1176	1.0259	0.0072	0.0028	0.0176	0.0202	0.0822	0.0043	-0.0216	-1.1710

Run#: 020	M = 1.200	U_∞ = 367.5 m/s
NOSE: SHARP	X = 5.000 cal	α = 0 °
RPM : 0000	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty{}^2}$	$\frac{1000*\overline{V'W'}}{U_\infty{}^2}$	$\frac{1000*\overline{W'U'}}{U_\infty{}^2}$
0.0047	0.7533	-0.0095	0.1120	0.0469	0.0365	0.2017	-0.2221	0.4924	-1.7442
0.0176	0.8132	-0.0073	0.0952	0.0443	0.0339	0.2052	-0.0275	0.0605	0.0982
0.0235	0.8603	-0.0089	0.0723	0.0347	0.0308	0.1693	0.0210	0.1804	-0.7251
0.0353	0.9596	-0.0043	0.0327	0.0275	0.0235	0.1345	0.0090	0.0701	-1.0861
0.0471	1.0155	0.0028	0.0141	0.0186	0.0172	0.0851	0.0018	-0.0051	-1.0385
0.0588	1.0305	0.0042	0.0156	0.0154	0.0142	0.0743	0.0086	-0.0162	-0.9693
0.0824	1.0306	0.0026	0.0163	0.0163	0.0127	0.0750	0.0023	0.0229	-1.0953
0.1059	1.0292	0.0047	0.0236	0.0153	0.0120	0.0731	0.0029	0.0141	-1.0104

[illegible]	M 1.209	U_∞ 367.5 m/s	
[illegible]	X 5.500 cal	α 0 °	
[illegible]	Z 0.000 cal	δ 0 °	

	VELOCITY			RMS			SHEAR STRESS		
Y(inch)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0059	0.9310	-0.1116	0.3077	0.0374	0.0292	0.1780	-0.0411	-0.0742	-2.3764
0.0235	1.0490	-0.1165	0.2021	0.0258	0.0265	0.1199	-0.0091	0.0456	-1.8538
0.0353	1.0734	-0.1185	0.0578	0.0227	0.0246	0.1093	0.0349	-0.3320	-2.1261
0.0588	1.1254	-0.1197	0.0406	0.0203	0.0190	0.0999	-0.0067	0.0099	-1.9077
0.0824	1.1302	-0.1179	0.0290	0.0187	0.0179	0.0918	0.0086	-0.0664	-1.6095
0.1059	1.1352	-0.1159	0.0004	0.0180	0.0186	0.0876	0.0046	-0.0058	-1.4904
0.1482	1.0045	-0.1146	0.2698	0.0262	0.0231	0.1251	-0.0395	0.0617	-2.0001
0.1647	1.1374	-0.1087	0.0019	0.0180	0.0192	0.0858	-0.0147	0.0513	-1.4426

Run	Mach	Alpha (deg)	Name	Span (NM)	X (cal)	Delta (deg)	Start
23	1.2	0	SHARP	9830	5.00	0	Y
22	1.2	0	SHARP	9830	5.50	0	Y

Run #: [illegible]	M [illegible]	U∞ 371.6 [illegible]
[illegible]	X [illegible]	α [illegible]
RIM : [illegible]	Z [illegible]	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0018	[illegible]	-0.0079	0.4144	0.0314	0.0245	0.1447	0.5015	0.0573	-1.1[illegible]
0.0178	[illegible]	-0.0024	0.3857	0.0296	0.0234	0.1378	0.0788	0.0479	-[illegible]
0.0245	[illegible]	-0.0066	0.3103	0.0266	0.0218	0.1258	-0.0232	0.1101	-2.5[illegible]
0.0353	[illegible]	-0.0048	0.1582	0.0217	0.0184	0.1028	0.0091	-0.5481	-1.[illegible]
0.0471	1.0[illegible]	0.0006	0.0309	0.0167	0.0150	0.0805	-0.0614	0.0[illegible]	-1.140[illegible]
0.0706	1.[illegible]	0.0021	0.0025	0.0138	0.0112	0.0920	-0.0044	-0.[illegible]	-1.[illegible]
0.1176	1.0244	0.0051	0.0162	0.0162	0.0123	0.0798	0.0111	-0.0011	-1.1[illegible]

Run#: 022	M = 1.200	U_∞ = 371.9 m/s
NOSE: SHARP	X = 5.500 cal	α = 0 °
RPM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0059	0.9684	-0.1134	0.3216	0.0301	0.0232	0.1403	-0.0278	0.0914	-2.6704
0.0118	0.9932	-0.1119	0.2767	0.0271	0.0242	0.1280	-0.0031	0.0823	-2.0763
0.0176	1.0214	-0.1136	0.2309	0.0258	0.0230	0.1216	-0.0288	0.0041	-2.1715
0.0235	1.0425	-0.1155	0.2008	0.0201	0.0212	0.0983	0.0173	-0.1027	-1.7244
0.0353	1.0828	-0.1172	0.1131	0.0193	0.0195	0.0934	0.0180	-0.0923	-1.5802
0.0471	1.1043	-0.1180	0.0433	0.0198	0.0177	0.0933	0.0149	-0.0533	-1.6756
0.0588	1.1148	-0.1191	0.0071	0.0186	0.0162	0.0903	-0.0056	0.0297	-1.5336
0.0824	1.1160	-0.1162	0.0130	0.0194	0.0145	0.0945	-0.0034	0.0085	-1.6841
0.0894	1.1197	-0.1071	0.0060	0.0195	0.0145	0.0934	-0.0004	0.0131	-1.6762
0.1059	1.1166	-0.1132	0.0055	0.0198	0.0159	0.0961	-0.0031	0.0074	-1.7641

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
115	1.2	10	BLUNT	0	5.00	-60	Y
62	1.2	10	BLUNT	0	5.00	0	Z
63	1.2	10	BLUNT	0	5.00	0	Z
66	1.2	10	BLUNT	0	5.00	0	Z
70	1.2	10	BLUNT	0	5.00	0	Z
71	1.2	10	BLUNT	0	5.00	0	Z
75	1.2	10	BLUNT	0	5.00	6	Z
140	1.2	10	BLUNT	0	5.00	60	Y

Run#: 115	M 1.200	U_∞ 368.6 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0294	0.8018	-0.0334	-0.1536	0.0646	0.0424	0.1290	0.1103	-1.1131	-3.2174
0.0353	0.8740	-0.0490	-0.1892	0.0672	0.0453	0.1269	-0.0197	-0.7831	-3.0257
0.0412	0.9541	-0.0380	-0.2089	0.0586	0.0406	0.1202	0.1736	-0.7427	-2.0919
0.0471	0.9993	-0.0448	-0.2144	0.0496	0.0384	0.0844	0.2916	-0.4073	-1.2787
0.0529	1.0416	-0.0367	-0.2003	0.0285	0.0338	0.0954	0.1339	-0.1770	-1.2799
0.0588	1.0463	-0.0441	-0.1956	0.0203	0.0321	0.0692	0.2244	-0.2324	-0.8850
0.0647	1.0561	-0.0402	-0.1733	0.0174	0.0302	0.0807	0.0520	-0.1681	-1.1051
0.0706	1.0555	-0.0426	-0.1674	0.0168	0.0291	0.0779	0.0430	-0.0436	-1.0595
0.0824	1.0544	-0.0380	-0.1673	0.0174	0.0291	0.0805	0.0787	-0.1811	-1.1473

Run#: 062	M = 1.200	U∞ 367.9 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
REM : 0000	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2353	1.0456	0.1490	0.2208	0.0148	0.0179	0.0707	-0.0254	-0.0869	-0.4686
-0.2118	1.0302	0.1340	0.1842	0.0242	0.0189	0.1229	0.0470	0.1706	0.9258
-0.2000	1.0171	0.1249	0.1352	0.0321	0.0193	0.1542	0.1154	0.3276	2.8093
-0.1882	1.0015	0.1135	0.1056	0.0377	0.0205	0.1819	0.1433	0.3597	3.8435
-0.1412	0.9296	0.0391	0.0784	0.0396	0.0405	0.1700	-0.0053	-0.1655	1.5088
-0.0941	0.9051	-0.0252	0.0031	0.0312	0.0373	0.1378	-0.1309	0.2379	-0.6510
-0.0471	0.9790	-0.0506	-0.0195	0.0349	0.0331	0.1527	-0.1422	0.3604	-0.8313
0.0000	1.0256	-0.0580	-0.0201	0.0197	0.0213	0.0898	-0.0260	-0.0784	-0.3999
0.0471	1.0335	-0.0582	0.0046	0.0146	0.0203	0.0669	-0.0280	-0.0763	-0.4658
0.0941	1.0162	-0.0605	0.0264	0.0199	0.0199	0.0912	0.0121	-0.1218	-0.4516
0.1412	0.9607	-0.0597	0.0450	0.0284	0.0263	0.1215	-0.0019	-0.0617	-0.4379
0.1882	0.8978	-0.0499	0.0272	0.0287	0.0307	0.1261	-0.0164	-0.0667	-0.5393
0.2118	0.8969	-0.0282	-0.0856	0.0355	0.0368	0.1578	0.1217	-1.2050	-2.3584
0.2353	0.9138	0.0091	-0.1966	0.0439	0.0489	0.1964	0.2107	-2.4306	-4.2089
0.2471	0.9355	0.0215	-0.2271	0.0402	0.0450	0.1747	0.2066	-1.6203	-2.3731
0.2588	0.9543	0.0422	-0.2750	0.0408	0.0448	0.1787	0.1410	-1.4192	-2.1898
0.2824	0.9945	0.0835	-0.2924	0.0431	0.0442	0.1988	0.1663	-0.8228	-0.4520
0.3059	1.0315	0.1059	-0.2532	0.0319	0.0362	0.1422	0.0853	-0.4288	-0.0714
0.3294	1.0534	0.1348	-0.2164	0.0197	0.0333	0.0898	-0.0930	-0.3638	-0.9087
0.3765	1.0530	0.1617	-0.1935	0.0151	0.0300	0.0715	-0.0945	-0.1956	-0.7694
0.4235	1.0476	0.1774	-0.1680	0.0147	0.0275	0.0656	-0.0835	-0.1608	-0.7372
0.4706	1.0403	0.1881	-0.1401	0.0154	0.0280	0.0719	-0.0847	-0.2166	-0.8762
0.5176	1.0364	0.1919	-0.1281	0.0160	0.0281	0.0741	-0.0997	-0.1091	-0.9374
0.5412	1.0343	0.1930	-0.1200	0.0163	0.0290	0.0763	-0.0979	-0.1522	-0.9952

RUN.#: 0063	M 1.200	U∞ 367.9 m/s
NOTE:BLUNT	X 5.000 cal	α = 10 °
RPM : 0000	Y - 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4471	1.0317	0.1982	0.1622	0.0135	0.0148	0.0658	-0.0071	-0.1088	-0.6450
-0.3765	1.0365	0.1875	0.1910	0.0138	0.0142	0.0665	0.0017	-0.0939	-0.6726
-0.3294	1.0420	0.1787	0.2032	0.0137	0.0143	0.0659	-0.0067	-0.1052	-0.6389
-0.2824	1.0439	0.1631	0.1980	0.0136	0.0162	0.0643	-0.0095	-0.1190	-0.7166
-0.2353	1.0461	0.1438	0.2037	0.0147	0.0180	0.0688	-0.0216	-0.0271	-0.5548
-0.1882	1.0326	0.1113	0.1555	0.0239	0.0189	0.1203	0.0438	0.1833	1.0965
-0.1412	0.9976	0.0782	0.0902	0.0311	0.0209	0.1471	0.0440	-0.0101	1.9534
-0.0941	0.9491	0.0267	0.0677	0.0296	0.0277	0.1374	0.0183	-0.2674	0.1247
-0.0471	0.9515	-0.0208	0.0753	0.0293	0.0301	0.1294	-0.0762	0.1591	-0.6178
0.0000	1.0180	-0.0565	0.0310	0.0245	0.0235	0.1106	-0.0549	0.0031	-1.3068
0.0471	1.0336	-0.0641	0.0086	0.0173	0.0190	0.0809	-0.0070	-0.1507	-0.9775
0.0941	1.0100	-0.0688	-0.0094	0.0229	0.0193	0.1062	0.0366	-0.1238	-0.6350
0.1412	0.9524	-0.0704	-0.0423	0.0268	0.0220	0.1231	-0.0021	-0.0451	-0.7600
0.1882	0.9301	-0.0333	-0.0916	0.0318	0.0296	0.1450	0.0510	-0.7570	-2.3937
0.2118	0.9595	0.0161	-0.1882	0.0387	0.0336	0.1833	0.2093	-1.3014	-4.0999
0.2353	0.9868	0.0375	-0.2140	0.0384	0.0338	0.1830	0.1864	-1.1229	-3.0175
0.2824	1.0411	0.0932	-0.2007	0.0249	0.0264	0.1171	0.0124	-0.4148	-1.4658
0.4706	1.0376	0.1825	-0.1391	0.0171	0.0202	0.0813	-0.0064	-0.2652	-1.1719
0.6118	1.0264	0.2017	-0.0952	0.0168	0.0206	0.0793	-0.0268	-0.1265	-1.1157

Run#: 066	M = 1.200	U∞= 370.2 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
REM : 0000	Y = 0.024 cal	S = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1882	0.9369	-0.0107	0.1869	0.0459	0.0432	0.2131	-0.0549	1.4199	3.6524
-0.1412	0.9775	-0.0566	-0.0571	0.0345	0.0317	0.1498	-0.0469	0.3516	-1.9190
-0.0941	1.0336	-0.0695	-0.0435	0.0236	0.0290	0.1077	-0.1276	0.0309	-1.7190
-0.0471	1.0440	-0.0795	0.0031	0.0226	0.0333	0.1064	-0.1597	-0.0091	-1.6568
0.0000	1.0413	-0.0780	0.0807	0.0227	0.0332	0.1083	-0.1601	0.0510	-1.3477
0.0471	1.0372	-0.0760	0.1773	0.0217	0.0276	0.0983	-0.0790	-0.0162	-1.0335
0.0941	1.0345	-0.0627	0.3430	0.0190	0.0228	0.0902	-0.0554	-0.0191	-1.4162
0.1412	0.9882	-0.0596	0.3371	0.0238	0.0243	0.1083	-0.0320	-0.1425	-1.0044
0.1647	0.9280	-0.0225	0.0039	0.0416	0.0397	0.2190	0.4020	-2.9759	-5.0163
0.1882	0.9367	0.0100	-0.2141	0.0404	0.0476	0.2029	0.2805	-2.6265	-4.5837
0.2118	0.9580	0.0600	-0.3872	0.0445	0.0489	0.2149	0.3464	-3.1117	-6.2187
0.2353	0.9826	0.0891	-0.4120	0.0350	0.0397	0.1733	0.0494	-0.7441	-1.2822
0.2824	1.0437	0.1327	-0.2616	0.0288	0.0301	0.1404	0.0180	-0.1590	-0.5835
0.3294	1.0576	0.1262	-0.1887	0.0272	0.0881	0.1048	-1.3633	-0.0402	-1.8215
0.3765	1.0457	0.1076	-0.1087	0.0411	0.1400	0.1662	-3.1809	-1.3520	-4.9242

Run#: 070	M = 1.200	U∞=370.6 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.141 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0159	0.1761	0.1139	0.0151	0.0156	0.0718	-0.0122	-0.0724	-0.6629
-0.4235	1.0175	0.1682	0.1248	0.0152	0.0172	0.0720	-0.0147	-0.0615	-0.7013
-0.3765	1.0176	0.1546	0.1327	0.0157	0.0179	0.0741	-0.0307	-0.0336	-0.7664
-0.3294	1.0188	0.1398	0.1409	0.0155	0.0184	0.0740	-0.0292	-0.0976	-0.7281
-0.2824	1.0222	0.1204	0.1395	0.0162	0.0190	0.0766	-0.0384	-0.0280	-0.8631
-0.2353	1.0239	0.0976	0.1364	0.0156	0.0198	0.0753	-0.0421	-0.0799	-0.7747
-0.1882	1.0247	0.0705	0.1241	0.0160	0.0193	0.0759	-0.0387	-0.0587	-0.8790
-0.1412	1.0236	0.0430	0.1042	0.0160	0.0200	0.0759	-0.0432	-0.0612	-0.8705
-0.0941	1.0225	0.0156	0.0793	0.0165	0.0210	0.0797	-0.0433	-0.0740	-0.8660
-0.0471	1.0218	-0.0063	0.0312	0.0163	0.0195	0.0773	-0.0475	-0.0132	-0.8178
0.0000	1.0215	-0.0143	-0.0180	0.0152	0.0194	0.0729	-0.0239	-0.0589	-0.6476
0.0471	1.0231	-0.0122	-0.0503	0.0171	0.0192	0.0828	0.0059	-0.2649	-1.0941
0.0941	1.0262	0.0027	-0.0959	0.0172	0.0226	0.0829	0.0348	-0.4469	-1.0791
0.1412	1.0292	0.0287	-0.1319	0.0172	0.0217	0.0841	0.0459	-0.3603	-1.1131
0.1882	1.0313	0.0592	-0.1535	0.0167	0.0217	0.0826	0.0413	-0.3093	-0.9972
0.2353	1.0319	0.0893	-0.1726	0.0172	0.0257	0.0830	0.0248	-0.3630	-1.0091
0.2824	1.0288	0.1119	-0.1597	0.0174	0.0209	0.0832	0.0166	-0.3005	-1.0712
0.3294	1.0262	0.1334	-0.1516	0.0168	0.0194	0.0819	0.0023	-0.2005	-0.9737
0.3765	1.0231	0.1511	-0.1361	0.0168	0.0191	0.0809	0.0039	-0.1989	-0.9490
0.4235	1.0213	0.1645	-0.1280	0.0159	0.0176	0.0793	0.0007	-0.1883	-0.8604
0.4706	1.0170	0.1741	-0.1142	0.0166	0.0163	0.0808	0.0157	-0.2116	-1.0037
0.5176	1.0166	0.1815	-0.1111	0.0169	0.0163	0.0817	0.0117	-0.1942	-1.0193
0.5647	1.0132	0.1873	-0.0972	0.0173	0.0171	0.0824	0.0056	-0.2363	-1.0748
0.6118	1.0127	0.1901	-0.0914	0.0169	0.0171	0.0812	0.0013	-0.2202	-1.0304

Run#: 071	M = 1.200	U∞ = 369.1 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RIM : 0000	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0234	0.1745	0.1060	0.0158	0.0162	0.0754	-0.0021	-0.1351	-0.8801
-0.4235	1.0247	0.1652	0.1072	0.0163	0.0168	0.0790	-0.0113	-0.0868	-0.9648
-0.3765	1.0253	0.1540	0.1076	0.0160	0.0178	0.0754	-0.0182	-0.1088	-0.9291
-0.3294	1.0268	0.1406	0.1094	0.0159	0.0181	0.0757	-0.0208	-0.1327	-0.9164
-0.2824	1.0299	0.1245	0.1074	0.0159	0.0189	0.0773	-0.0266	-0.1404	-0.9524
-0.2353	1.0314	0.1062	0.0985	0.0160	0.0186	0.0762	-0.0320	-0.1029	-0.9666
-0.1882	1.0304	0.0842	0.0922	0.0166	0.0190	0.0797	-0.0237	-0.1425	-1.0959
-0.1412	1.0307	0.0641	0.0773	0.0156	0.0184	0.0732	-0.0315	-0.0659	-0.9284
-0.0941	1.0301	0.0442	0.0576	0.0170	0.0173	0.0811	-0.0159	-0.1161	-1.1599
-0.0471	1.0326	0.0325	0.0278	0.0161	0.0169	0.0778	-0.0158	-0.0992	-1.0140
0.0000	1.0293	0.0249	-0.0088	0.0163	0.0173	0.0807	0.0084	-0.2108	-1.0659
0.0471	1.0304	0.0267	-0.0461	0.0172	0.0178	0.0839	0.0054	-0.2495	-1.1725
0.0941	1.0320	0.0355	-0.0863	0.0173	0.0187	0.0841	0.0182	-0.2892	-1.2054
0.1412	1.0341	0.0541	-0.1152	0.0166	0.0200	0.0816	0.0057	-0.3116	-1.0728
0.1882	1.0321	0.0739	-0.1245	0.0168	0.0213	0.0844	0.0004	-0.3901	-1.0811
0.2353	1.0310	0.0942	-0.1312	0.0166	0.0213	0.0844	-0.0077	-0.3111	-1.0505
0.2824	1.0299	0.1158	-0.1351	0.0175	0.0212	0.0858	0.0054	-0.3380	-1.1383
0.3294	1.0278	0.1337	-0.1308	0.0172	0.0201	0.0801	-0.0215	-0.1896	-1.0060
0.3765	1.0261	0.1483	-0.1242	0.0170	0.0189	0.0825	0.0019	-0.2171	-1.0484
0.4235	1.0234	0.1599	-0.1146	0.0168	0.0185	0.0822	0.0013	-0.1954	-1.0156
0.4706	1.0209	0.1687	-0.1068	0.0169	0.0173	0.0829	0.0089	-0.1861	-1.0543
0.5176	1.0195	0.1767	-0.1062	0.0167	0.0165	0.0813	0.0110	-0.2065	-1.0434
0.5647	1.0186	0.1813	-0.0978	0.0169	0.0166	0.0828	0.0130	-0.2431	-1.0652
0.6118	1.0174	0.1855	-0.0972	0.0170	0.0169	0.0809	-0.0027	-0.1892	-1.0177
0.6588	1.0161	0.1897	-0.0884	0.0165	0.0175	0.0802	-0.0050	-0.1341	-0.9818
0.7059	1.0149	0.1925	-0.0869	0.0170	0.0180	0.0827	0.0021	-0.1789	-1.0579

Run#: 075	M = 1.200	U∞=369.9 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0227	0.1848	0.1390	0.0160	0.0169	0.0778	-0.0147	-0.1007	-0.9087
-0.4235	1.0242	0.1754	0.1423	0.0159	0.0194	0.0770	-0.0210	-0.1371	-0.8308
-0.3765	1.0271	0.1644	0.1495	0.0154	0.0200	0.0735	-0.0290	-0.1182	-0.7961
-0.3294	1.0294	0.1478	0.1608	0.0158	0.0205	0.0772	-0.0460	-0.0630	-0.8566
-0.2824	1.0360	0.1291	0.1968	0.0151	0.0232	0.0736	-0.0484	-0.1898	-0.9532
-0.2353	1.0343	0.0987	0.1609	0.0161	0.0235	0.0756	-0.0697	-0.0784	-0.9000
-0.1882	1.0341	0.0713	0.1522	0.0158	0 0252	0.0759	-0.0709	-0.1022	-0.8172
-0.1412	1.0210	0.0349	0.1182	0.0200	0 0278	0.0948	-0.0600	-0.1859	-0.3814
-0.0941	1.0052	-0.0018	0.0743	0.0214	0 0301	0.1027	-0.0806	(.0927	-0.5082
-0.0471	1.0141	-0.0395	0.0244	0.0208	0 0254	0.0964	-0.0822	-(.0517	-1.1200
0.0000	1.0213	-0.0526	-0.0067	0.0180	0.0202	0.0868	-0.0250	-0.1313	-0.9906
0.0471	1.0086	-0.0555	-0.0452	0.0200	0.0211	0.0963	-0.0047	-0.1075	-0.6360
0.0941	0.9927	-0.0308	-0.1402	0.0239	0.0341	0.1170	-0.0302	-(.5365	-1.1391
0.1412	1.0029	0.0159	-0.2221	0.0265	0.0328	0.1214	0.0105	-(.6686	-1.3546
0.1882	1.0271	0.0536	-0.2243	0.0224	0.0286	0.1141	0.0082	-0.5060	-1.0048
0.2353	1.0369	0.0832	-0.2043	0.0183	0.0249	0.0883	-0.0270	-(.2551	-1.0288
0.2824	1.0359	0.1139	-0.1993	0.0179	0.0265	0.0847	-0.0508	-(.2993	-1.0641
0.3294	1.0330	0.1368	-0.1813	0.0182	0.0241	0.0843	-0.0418	-0.1756	-1.1069
0.3765	1.0277	0.1573	-0.1667	0.0171	0.0228	0.0845	-0.0379	-0.2030	-1.0437
0.4235	1.0224	0.1707	-0.1517	0.0178	0.0219	0.0871	-0.0221	-0.1910	-1.1561
0.4706	1.0214	0.1812	-0.1378	0.0179	0.0207	0.0866	-0.0263	-0.1750	-1.1524
0.5647	1.0162	0.1940	-0.1090	0.0177	0.0204	0.0856	-0.0211	-0.1753	-1.0678
0.7059	1.0140	0.2033	-0.0895	0.0173	0.0206	0.0837	-0.0169	-0.1798	-1.0247

Run#: 140	M = 1.200	U∞=370.2 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 0000	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{J\infty}$	$\frac{1000*\overline{U'V'}}{U\infty\hat{}2}$	$\frac{1000*\overline{V'W'}}{U\infty\hat{}2}$	$\frac{1000*\overline{W'U'}}{U\infty\hat{}2}$
0.0353	0.9937	-0.0296	0.1740	0.0404	0.0378	0.1527	0.2528	0.8810	0.7330
0.0471	1.0423	-0.0231	0.1854	0.0186	0.0311	0.0884	0.0326	-0.0507	-1.2639
0.0588	1.0497	-0.0370	0.1557	0.0165	0.0282	0.0777	-0.0330	0.0245	-0.9951
0.0706	1.0471	-0.0337	0.1258	0.0174	0.0264	0.0805	-0.0490	-0.0710	-1.0307
0.1176	1.0372	-0.0307	0.1091	0.0168	0.0248	0.0750	-0.0511	-0.0301	-0.8220

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
122	1.2	10	BLUNT	0	5.50	-60	Y
78	1.2	10	BLUNT	0	5.50	0	Z
79	1.2	10	BLUNT	0	5.50	0	Z
80	1.2	10	BLUNT	0	5.50	0	Z
87	1.2	10	BLUNT	0	5.50	0	Z
88	1.2	10	BLUNT	0	5.50	0	Z
89	1.2	10	BLUNT	0	5.50	0	Z
134	1.2	10	BLUNT	0	5.50	60	Y

Run#: 123	M 1.200	U∞=569.2 m/s
MOVEMENT	X 5.500 cal	α = 10 °
RPM : 6600	Z 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0353	0.8605	-0.1564	-0.0166	0.0584	0.0376	0.1473	-1.1282	1.4508	-4.6041
0.0412	0.9127	-0.1554	-0.0740	0.0532	0.0348	0.1275	-0.6943	0.7104	-3.3235
0.0471	0.9498	-0.1520	-0.0930	0.0531	0.0347	0.1100	-0.7674	0.6908	-2.7839
0.0529	0.9994	-0.1571	-0.1357	0.0454	0.0341	0.1149	-0.5360	0.5088	-2.4580
0.0588	1.0372	-0.1515	-0.1601	0.0399	0.0288	0.1057	-0.2377	0.1228	-1.8608
0.0647	1.0634	-0.1566	-0.1620	0.0351	0.0288	0.0977	-0.2847	0.1786	-1.5331
0.0706	1.0827	-0.1584	-0.1594	0.0271	0.0243	0.0892	-0.0864	0.0461	-1.2772
0.0824	1.1040	-0.1586	-0.1661	0.0186	0.0215	0.0839	0.0272	-0.0348	-1.1352
0.0941	1.1042	-0.1574	-0.1604	0.0188	0.0203	0.0888	0.0286	-0.0604	-1.2808
0.1059	1.1138	-0.1502	-0.1396	0.0174	0.0205	0.0853	0.0075	-0.0198	-1.3647
0.1176	1.1068	-0.1487	-0.1599	0.0191	0.0195	0.0881	0.0213	0.0224	-1.2770
0.1412	1.1065	-0.1466	-0.1510	0.0195	0.0198	0.0887	0.0266	0.0281	-1.2835

Run#: 078	M 1.200	U∞ 869.27 ft/s
NOSE:BLUNT	X = 5.500 cal	α = 10
RPM : 0000	Y = 0.024 cal	δ 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2353	1.0345	0.1145	0.3078	0.0280	0.0276	0.1414	0.0876	-0.6679	-2.2793
-0.1882	0.9648	0.0561	0.2356	0.0443	0.0559	0.2049	0.2926	-0.6436	1.2309
-0.1647	0.9308	-0.0115	0.1470	0.0322	0.0642	0.1426	-0.5939	0.1135	-0.5828
-0.1412	0.9408	-0.0776	0.0965	0.0282	0.0592	0.1237	-0.6751	0.0159	-1.3376
-0.0941	1.0029	-0.1575	0.0284	0.0296	0.0366	0.1265	-0.2604	0.2561	-1.2304
-0.0471	1.0510	-0.1835	0.0329	0.0212	0.0360	0.0918	-0.1528	-0 1076	-0.8626
0.0000	1.0655	-0.2006	0.0229	0.0150	0.0293	0.0711	-0.1061	-0.1244	-0.6165
0.0471	1.0569	-0.2014	0.0264	0.0163	0.0223	0.0769	-0.0451	-0.1844	-0.7889
0.0941	1.0334	-0.2054	0.0362	0.0213	0.0236	0.0972	-0.0497	-0.1131	-1.1599
0.1412	0.9817	-0.1859	0.0850	0.0259	0.0369	0.1168	-0.2718	0.3452	-1.2470
0.1647	0.9633	-0.1695	0.0823	0.0246	0.0395	0.1117	-0.2234	-0.0636	-1.2050
0.1882	0.9445	-0.1357	0.0130	0.0292	0.0672	0.1423	-0.2985	-2.4584	-2.2748
0.2000	0.9521	-0.0958	-0.1096	0.0395	0.0743	0.2141	0.3953	-6.4137	-6.6565
0.2118	0.9573	-0.0782	-0.1599	0.0426	0.0868	0.2299	0.6798	-9.6333	-7.9014
0.2176	0.9667	-0.0278	-0.2699	0.0455	0.0874	0.2420	0.6009	-9.1535	-9.2613
0.2235	0.9757	-0.0002	-0.3349	0.0442	0.0881	0.2363	0.5488	-9.0907	-8.5864
0.2353	0.9877	0.0378	-0.3926	0.0416	0.0817	0.2121	0.0613	-5.2278	-6.1552
0.2588	1.0231	0.0879	-0.3842	0.0401	0.0556	0.1897	0.1377	-1.1163	-2.7078
0.2824	1.0529	0.1161	-0.3288	0.0286	0.0417	0.1352	-0.1036	-0.2765	-0.9404
0.3294	1.0782	0.1415	-0.2720	0.0165	0.0221	0.0783	-0.0270	-0.2138	-0.9681
0.3765	1.0814	0.1507	-0.2706	0.0159	0.0206	0.0751	-0.0250	-0.1752	-0.9686
0.4235	1.0859	0.1238	-0.2368	0.0187	0.0430	0.0865	-0.2173	-0.5141	-1.2773

	VELOCITY			RMS			SHEAR STRESS		
Z/[illegible]	$\bar{U}/U_\infty$	$\bar{V}/U_\infty$	$\bar{W}/U_\infty$	$\overline{U'}/U_\infty$	$\overline{V'}/U_\infty$	$\overline{W'}/U_\infty$	$1000 \cdot \overline{U'V'}/U_\infty^2$	$1000 \cdot \overline{V'W'}/U_\infty^2$	$1000 \cdot \overline{W'U'}/U_\infty^2$
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0121	-0.2068	[illegible]
[illegible]	[illegible]	0.1340	0.2761	0.0147	0.0143	0.0721	0.0004	-0.1334	[illegible]
-0.2826	[illegible]	0.1250	0.2431	[illegible]	0.0152	0.0742	0.0027	-0.1125	[illegible]
[illegible]	1.0427	0.1018	[illegible]	0.0218	[illegible]	0.1057	0.0376	-0.2494	-0.4802
-0.1882	1.0150	0.0737	0.3155	0.0299	0.0261	0.1482	0.1173	-0.4216	0.1529
-0.1647	0.9836	0.0251	0.2718	0.0310	0.0356	0.1413	0.0447	-0.2528	1.1534
-0.1412	0.9652	-0.0366	0.2287	0.0268	0.0525	0.1228	-0.3378	0.2750	[illegible]
-0.1176	0.9662	-0.0933	0.1435	0.0234	0.0404	0.1051	-0.2791	0.2718	[illegible]
-0.0941	0.9834	-0.1379	0.0662	0.0239	0.0346	0.1047	-0.2438	0.3460	[illegible]
-0.0471	1.0421	-0.1876	0.0198	0.0188	0.0254	0.0842	-0.1005	-0.0275	[illegible]
0.0000	1.0572	-0.2064	0.0153	0.0139	0.0195	0.0653	-0.0393	-0.0891	-0.5044
0.0471	1.0437	-0.2118	0.0145	0.0169	0.0197	0.0797	-0.0336	-0.1138	-0.8755
0.0941	1.0125	-0.2085	0.0193	0.0204	0.0217	0.0955	-0.0479	-0.0947	-0.8305
0.1412	0.9778	-0.1943	-0.0228	0.0206	0.0248	0.0925	-0.0567	-0.1286	-0.5984
0.1647	0.9615	-0.1641	-0.0637	0.0230	0.0318	0.1083	-0.1376	-0.2841	-1.2057
0.1882	0.9618	-0.1427	-0.1239	0.0263	0.0345	0.1298	0.0201	-0.9285	[illegible]
0.2118	[illegible]	-0.0714	-0.3157	0.0363	0.0595	0.1852	0.3516	-3.8186	[illegible]
0.2353	[illegible]	[illegible]	-0.3584	0.0338	0.0455	0.1650	0.0532	-1.3159	[illegible]
[illegible]	[illegible]	[illegible]	-0.3956	0.0280	0.0510	0.1162	0.0841	-0.6044	[illegible]
[illegible]	[illegible]	[illegible]	-0.3543	0.0238	0.0346	0.1124	-0.0460	-0.2616	[illegible]
0.2824	[illegible]	[illegible]	-0.3163	0.0209	[illegible]	0.0970	[illegible]	-0.1066	[illegible]
0.3294	[illegible]	[illegible]	-0.2540	0.0160	0.0190	0.0748	-0.0154	-0.1527	[illegible]
[illegible]	[illegible]	[illegible]	-0.1827	0.0156	0.0185	0.0743	[illegible]	-0.1477	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0186	0.0738	-0.0133	-0.1864	[illegible]
[illegible]	[illegible]	[illegible]	-0.1480	0.0152	0.0178	[illegible]	[illegible]	-0.1717	[illegible]
[illegible]	[illegible]	[illegible]	-0.1319	[illegible]	0.0176	0.0733	-0.0102	-0.1096	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.0133	[illegible]	[illegible]

Run#: [illegible]	M [illegible]	U∞ 371.7 m/s
NOSE: BLUNT	X [illegible] cal	α = 10 °
RPM : [illegible]	Y 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\overline{U}/U_\infty$	$\overline{V}/U_\infty$	$\overline{W}/U_\infty$	$\overline{U'}/U_\infty$	$\overline{V'}/U_\infty$	$\overline{W'}/U_\infty$	$1000 \cdot \overline{U'V'}/U_\infty^2$	$1000 \cdot \overline{V'W'}/U_\infty^2$	$1000 \cdot \overline{W'U'}/U_\infty^2$
-0.5176	1.0920	0.1595	0.2032	0.0159	0.0167	0.0772	0.0003	-0.1760	-1.0520
-0.4706	1.0917	0.1531	0.2130	0.0161	0.0170	0.0783	-0.0016	-0.1843	-1.0558
-0.4235	1.0896	0.1466	0.2222	0.0157	0.0167	0.0755	-0.0133	-0.1135	-0.9500
-0.3765	1.0884	0.1374	0.2357	0.0159	0.0166	0.0774	-0.0044	-0.1792	-0.9960
-0.3294	1.0877	0.1264	0.2490	0.0158	0.0171	0.0751	-0.0060	-0.1670	-0.9211
-0.2824	1.0832	0.1079	0.2699	0.0155	0.0170	0.0740	-0.0108	-0.1283	-0.9102
-0.2588	1.0793	0.1000	0.2719	0.0153	0.0186	0.0748	-0.0096	-0.1819	-0.8660
-0.2353	1.0733	0.0833	0.2784	0.0164	0.0198	0.0781	-0.0084	-0.2126	-0.9691
-0.1882	1.0448	0.0503	0.2738	0.0221	0.0245	0.1044	0.0013	-0.2158	-1.0271
-0.1412	1.0070	-0.0141	0.2311	0.0266	0.0375	0.1187	-0.0687	-0.2115	-0.7845
-0.1176	1.0087	-0.0600	0.2126	0.0253	0.0386	0.1134	-0.1558	0.2267	-0.8839
-0.1059	1.0019	-0.0857	0.1686	0.0237	0.0401	0.1085	-0.2385	0.2321	-1.1667
-0.0941	0.9999	-0.1036	0.1381	0.0241	0.0358	0.1075	-0.1945	0.1264	-1.3050
-0.0706	1.0126	-0.1523	0.0688	0.0232	0.0300	0.1032	-0.1581	0.0239	-1.7135
-0.0471	1.0339	-0.1750	0.0278	0.0220	0.0306	0.0981	-0.1692	-0.0768	-1.4850
-0.0235	1.0477	-0.1931	0.0189	0.0182	0.0260	0.0812	-0.1026	-0.0292	-0.9754
0.0000	1.0543	-0.2036	0.0024	0.0155	0.0238	0.0718	-0.0612	-0.0797	-0.7684
0.0471	1.0432	-0.2087	-0.0137	0.0167	0.0219	0.0754	-0.0356	-0.1676	-0.8300
0.0941	1.0205	-0.2008	-0.0562	0.0197	0.0248	0.0951	-0.0381	-0.3683	-1.1565
0.1412	1.0020	-0.1617	-0.1441	0.0225	0.0328	0.1082	-0.0136	-0.8555	-1.6476
0.1882	1.0136	-0.0943	-0.2713	0.0280	0.0397	0.1373	0.0067	-1.1964	-2.7864
0.2118	1.0355	-0.0418	-0.3338	0.0258	0.0447	0.1171	-0.0518	-0.7797	-1.8254
0.2353	1.0507	0.0071	-0.3461	0.0222	0.0427	0.1018	-0.1676	-0.2506	-1.1288
0.2588	1.0640	0.0423	-0.3289	0.0190	0.0339	0.0855	-0.1093	-0.2323	-0.8340
0.2824	1.0721	0.0661	-0.3097	0.0167	0.0251	0.0748	-0.0587	-0.1491	-0.8310
0.3059	1.0772	0.0895	-0.3024	0.0149	0.0234	0.0712	-0.0396	-0.1746	-0.8035
0.3294	1.0768	0.0975	-0.3022	0.0154	0.0229	0.0741	-0.0397	-0.2094	-0.9099
0.3765	1.0781	0.1132	-0.2749	0.0151	0.0217	0.0719	-0.0419	-0.1650	-0.8809
[illegible]	[illegible]	[illegible]	-0.2558	0.0149	0.0217	0.0708	-0.0457	-0.1485	[illegible]
[illegible]	[illegible]	[illegible]	-0.2384	0.0154	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	-0.2161	0.0146	[illegible]	[illegible]	0.0617	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Run#: 087	M = 1.206	U∞ 372.0 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y/D	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0938	0.1215	0.1768	0.0151	0.0163	0.0729	0.0071	-0.1862	-0.8455
-0.4706	1.0922	0.1136	0.1794	0.0151	0.0164	0.0719	-0.0127	-0.1363	-0.8308
-0.4235	1.0947	0.1004	0.1838	0.0150	0.0165	0.0728	-0.0038	-0.1707	-0.8862
-0.3765	1.0935	0.0870	0.1925	0.0156	0.0158	0.0751	0.0031	-0.1775	-0.9839
-0.3294	1.0958	0.0693	0.1962	0.0154	0.0165	0.0738	-0.0024	-0.1787	-0.9481
-0.2824	1.0964	0.0462	0.1944	0.0155	0.0170	0.0735	-0.0164	-0.1098	-0.9758
-0.2353	1.0904	0.0172	0.1660	0.0149	0.0188	0.0721	-0.0175	-0.1817	-0.8975
-0.1882	1.0792	-0.0094	0.1229	0.0151	0.0182	0.0725	-0.0096	-0.2115	-1.0023
-0.1412	1.0770	-0.0389	0.0966	0.0148	0.0157	0.0703	-0.0199	-0.0885	-0.9039
-0.0941	1.0753	-0.0692	0.0489	0.0151	0.0186	0.0717	-0.0288	-0.1083	-0.9511
-0.0235	1.0755	-0.0981	-0.0292	0.0154	0.0194	0.0735	-0.0288	-0.1552	-1.0139
0.0000	1.0766	-0.1002	-0.0589	0.0152	0.0200	0.0723	-0.0264	-0.1828	-0.9810
0.0235	1.0774	-0.1004	-0.0803	0.0151	0.0205	0.0718	-0.0273	-0.1880	-0.9457
0.0471	1.0797	-0.0929	-0.1160	0.0153	0.0206	0.0718	-0.0207	-0.2326	-0.9677
0.0941	1.0804	-0.0686	-0.1589	0.0146	0.0203	0.0707	-0.0097	-0.2664	-0.8863
0.1412	1.0858	-0.0374	-0.1859	0.0139	0.0169	0.0681	0.0004	-0.1943	-0.7837
0.1882	1.0923	-0.0099	-0.2102	0.0157	0.0199	0.0760	-0.0159	-0.2168	-1.0080
0.2353	1.0987	0.0184	-0.2368	0.0155	0.0223	0.0747	-0.0331	-0.2388	-1.0031
0.2824	1.0987	0.0430	-0.2388	0.0157	0.0204	0.0740	-0.0385	-0.1481	-0.9938
0.3294	1.0954	0.0663	-0.2306	0.0156	0.0207	0.0743	-0.0221	-0.2382	-0.9793
0.3765	1.0937	0.0843	-0.2194	0.0152	0.0190	0.0730	-0.0205	-0.1932	-0.9322
0.4235	1.0922	0.0990	-0.2085	0.0157	0.0201	0.0743	-0.0441	-0.0841	-0.9687
0.4706	1.0923	0.1108	-0.2024	0.0155	0.0197	0.0746	-0.0276	-0.1456	-0.9690
0.5176	1.0904	0.1196	-0.1931	0.0152	0.0189	0.0741	-0.0314	-0.1255	-0.9447
0.5647	1.0926	0.1285	-0.1915	0.0158	0.0198	0.0765	-0.0359	-0.1307	-1.0360

Run#: [illegible]	M = 1.200	U∞ = 372.0 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RHM : 3006	Y = 0.141 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0913	0.1342	0.1861	0.0149	0.0175	0.0713	-0.0088	-0.1464	-0.8580
-0.4706	1.0870	0.1246	0.1933	0.0150	0.0161	0.0723	0.0002	-0.1867	-0.9023
-0.4235	1.0894	0.1132	0.2040	0.0153	0.0166	0.0730	-0.0107	-0.1534	-0.8943
-0.3765	1.0893	0.0993	0.2135	0.0154	0.0168	0.0728	-0.0089	-0.1406	-0.9196
-0.3294	1.0893	0.0834	0.2202	0.0148	0.0170	0.0721	-0.0044	-0.1484	-0.8823
-0.2824	1.0891	0.0594	0.2166	0.0153	0.0176	0.0732	-0.0161	0.1440	-0.9887
-0.2353	1.0832	0.0256	0.2003	0.0143	0.0211	0.0666	-0.0411	0.1051	-0.8061
-0.1882	1.0720	-0.0182	0.1569	0.0138	0.0218	0.0668	-0.0401	-0.2144	-0.8340
-0.1412	1.0712	-0.0609	0.1323	0.0145	0.0230	0.0688	-0.0606	-0.0561	-0.7961
-0.0941	1.0660	-0.1122	0.0698	0.0156	0.0292	0.0710	-0.1119	-0.0311	-0.8196
-0.0471	1.0670	-0.1456	0.0090	0.0162	0.0278	0.0750	-0.1038	-0.0887	-1.0140
0.0000	1.0697	-0.1544	-0.0668	0.0160	0.0256	0.0771	-0.0592	-0.2411	-1.0198
0.0471	1.0717	-0.1436	-0.1362	0.0163	0.0281	0.0765	-0.0794	-0.2711	-1.0244
0.0941	1.0763	-0.1025	-0.1963	0.0156	0.0318	0.0744	-0.0842	-0.3912	-0.9091
0.1412	1.0792	-0.0514	-0.2295	0.0145	0.0229	0.0691	-0.0211	-0.2940	-0.7972
0.1882	1.0848	-0.0071	-0.2546	0.0159	0.0223	0.0754	-0.0257	-0.2005	-0.9753
0.2353	1.0876	0.0363	-0.2592	0.0156	0.0226	0.0736	-0.0344	-0.2434	-0.9507
0.2824	1.0877	0.0684	-0.2646	0.0154	0.0188	0.0750	-0.0069	-0.2545	-0.9743
0.3294	1.0884	0.0848	-0.2526	0.0152	0.0178	0.0739	-0.0184	-0.1256	-0.9575
0.3765	1.0878	0.0982	-0.2417	0.0155	0.0176	0.0736	-0.0199	-0.1674	-0.9647
0.4235	1.0872	0.1123	-0.2289	0.0151	0.0178	0.0723	-0.0086	-0.1934	-0.9076
0.4706	1.0871	0.1216	-0.2172	0.0156	0.0178	0.0752	-0.0280	-0.1356	-0.9849
0.5176	1.0889	0.1313	-0.2093	0.0157	0.0203	0.0729	-0.0306	-0.1880	-0.9335
0.5647	1.0903	0.1381	-0.2057	0.0154	0.0214	0.0718	-0.0482	-0.1262	-0.9088

Run#: 059	M 1.200	U∞=372.0 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 3000	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
S(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0904	0.1434	0.2057	0.0148	0.0186	0.0721	-0.0245	-0.1808	-0.8370
-0.4706	1.0897	0.1324	0.2142	0.0150	0.0192	0.0731	-0.0232	-0.1231	-0.9006
-0.4235	1.0901	0.1205	0.2236	0.0150	0.0176	0.0724	-0.0114	-0.1422	-0.9099
-0.3765	1.0884	0.1051	0.2367	0.0152	0.0184	0.0722	-0.0333	-0.1008	-0.9053
-0.3294	1.0854	0.0846	0.2483	0.0146	0.0184	0.0697	-0.0191	-0.1351	-0.8210
-0.2824	1.0790	0.0573	0.2491	0.0150	0.0257	0.0688	-0.0904	-0.0492	-0.7920
-0.2353	1.0524	0.0151	0.1829	0.0165	0.0348	0.0826	-0.0942	-0.7016	-0.8457
-0.1882	1.0527	-0.0461	0.2392	0.0185	0.0364	0.0841	-0.1580	-0.3921	-0.6656
-0.1412	1.0239	-0.1361	0.1095	0.0182	0.0374	0.0816	-0.2272	0.1090	-0.6812
-0.0941	1.0493	-0.1818	0.0429	0.0160	0.0231	0.0744	-0.0707	-0.0752	-0.8476
-0.0471	1.0556	-0.1886	-0.0152	0.0133	0.0209	0.0635	-0.0436	-0.0802	-0.5585
0.0000	1.0506	-0.1905	-0.0501	0.0141	0.0236	0.0657	-0.0613	-0.1106	-0.5348
0.0471	1.0346	-0.1746	-0.0874	0.0172	0.0276	0.0839	-0.0544	-0.1880	-0.6048
0.0941	1.0243	-0.1179	-0.2205	0.0220	0.0366	0.1035	0.0293	-1.2379	-1.5340
0.1412	1.0513	-0.0297	-0.2673	0.0225	0.0331	0.1089	0.1052	-0.7782	-1.1081
0.1882	1.0758	0.0370	-0.2740	0.0182	0.0311	0.0838	-0.0906	-0.3903	-0.9735
0.2353	1.0814	0.0738	-0.2868	0.0157	0.0219	0.0762	-0.0314	-0.2528	-0.9360
0.2824	1.0813	0.0904	-0.2831	0.0158	0.0198	0.0746	-0.0201	-0.1777	-0.9663
0.3294	1.0848	0.1090	-0.2766	0.0152	0.0192	0.0731	-0.0207	-0.2037	-0.9073
0.3765	1.0848	0.1221	-0.2527	0.0157	0.0192	0.0727	-0.0331	-0.1248	-0.9678
0.4235	1.0869	0.1327	-0.2462	0.0158	0.0194	0.0746	-0.0506	-0.1485	-0.9723
0.4706	1.0856	0.1399	-0.2263	0.0151	0.0212	0.0735	-0.0208	-0.2309	-0.9023
0.5176	1.0861	0.1458	-0.2158	0.0158	0.0201	0.0735	-0.0311	-0.1208	-0.9607

Run#: 134	M = 1.200	U∞ = 370.3 m/s
NOSE: BLUNT	X 5.500 cal	α 10 °
RPM : 6000	Z 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0235	1.0244	-0.0891	0.2325	0.0427	0.0486	0.1199	0.0989	-0.6995	-1.7954
0.0294	1.0236	-0.1050	0.2087	0.0564	0.0393	0.1262	0.7010	0.8891	-0.4859
0.0353	1.0419	-0.1073	0.1955	0.0498	0.0400	0.1112	0.5026	0.5014	-0.5100
0.0412	1.0662	-0.1037	0.1947	0.0463	0.0350	0.1194	0.3145	-0.0075	-0.3621
0.0471	1.0790	-0.1073	0.1837	0.0374	0.0331	0.1150	0.1150	0.0775	-0.4980
0.0529	1.0485	-0.1061	0.1074	0.0300	0.0352	0.1307	-0.0314	-0.1475	-1.6285
0.0588	1.0621	-0.1020	0.0132	0.0256	0.0369	0.1405	-0.0238	-0.2646	-0.5951
0.0647	1.1096	-0.1080	0.1780	0.0196	0.0344	0.0931	0.0359	-0.1119	-1.2198
0.0706	1.1157	-0.1174	0.1816	0.0173	0.0330	0.0826	0.0024	0.0916	-1.2159
0.0824	1.1191	-0.1201	0.1754	0.0174	0.0337	0.0860	0.0005	-0.0491	-1.2640
0.0941	1.1193	-0.1168	0.1682	0.0181	0.0322	0.0853	-0.0090	0.0666	-1.3101
0.1176	1.1196	-0.1161	0.1637	0.0182	0.0342	0.0843	-0.0064	0.0355	-1.3029

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
116	1.2	10	BLUNT	9830	5.00	-60	Y
64	1.2	10	BLUNT	9830	5.00	0	Z
65	1.2	10	BLUNT	9830	5.00	0	Z
67	1.2	10	BLUNT	9830	5.00	0	Z
68	1.2	10	BLUNT	9830	5.00	0	Z
72	1.2	10	BLUNT	9830	5.00	0	Z
73	1.2	10	BLUNT	9830	5.00	0	Z
74	1.2	10	BLUNT	9830	5.00	0	Z
139	1.2	10	BLUNT	9830	5.00	60	Y

Run#: 116	M = 1.200	U∞=370.8 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0353	0.7668	-0.0247	-0.0922	0.0923	0.0452	0.1553	0.5978	-1.3727	-8.6689
0.0412	0.8475	-0.0141	-0.1395	0.0864	0.0484	0.1594	0.4774	-1.2123	-6.3226
0.0471	0.8992	-0.0073	-0.1678	0.0805	0.0460	0.1642	0.4422	-0.7767	-4.7862
0.0529	0.9634	-0.0089	-0.1795	0.0692	0.0383	0.1262	0.5150	-0.8139	-3.0716
0.0588	1.0142	0.0007	-0.1917	0.0552	0.0354	0.1023	0.5151	-0.3959	-1.6396
0.0647	1.0442	0.0015	-0.1840	0.0258	0.0308	0.0759	0.2055	-0.2475	-0.9282
0.0706	1.0518	-0.0013	-0.1729	0.0188	0.0289	0.0709	0.1067	-0.2147	-0.9124
0.0824	1.0512	-0.0118	-0.1755	0.0167	0.0274	0.0705	0.0987	-0.1207	-0.8088

Run#: 064	M = 1.200	U∞=367.9 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
REM : 4830	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(Cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.3765	1.0369	0.1790	0.1762	0.0139	0.0146	0.0679	-0.0088	-0.0930	-0.8562
-0.3294	1.0386	0.1665	0.1837	0.0163	0.0152	0.0791	0.0086	-0.1498	-1.1394
-0.2824	1.0426	0.1514	0.1860	0.0162	0.0168	0.0793	-0.0050	-0.1713	-1.0578
-0.2353	1.0483	0.1261	0.1889	0.0170	0.0232	0.0790	-0.0636	0.0048	-1.1195
-0.1882	1.0486	0.0996	0.1858	0.0160	0.0240	0.0769	-0.0655	-0.0995	-0.8450
-0.1412	1.0325	0.0706	0.1587	0.0220	0.0237	0.1036	-0.0128	-0.0870	-0.3150
-0.0941	0.9821	0.0288	0.0960	0.0305	0.0330	0.1438	0.1559	0.3136	0.8310
-0.0471	0.9406	-0.0114	0.0650	0.0299	0.0315	0.1390	-0.0078	0.3791	-0.0080
0.0000	1.0066	-0.0424	0.0388	0.0348	0.0280	0.1501	-0.0047	0.2457	-2.1375
0.0471	1.0366	-0.0582	-0.0018	0.0199	0.0221	0.0941	-0.0346	-0.1278	-1.3248
0.0941	1.0274	-0.0669	-0.0149	0.0191	0.0225	0.0883	-0.0432	-0.1778	-0.8070
0.1412	1.0000	-0.0697	-0.0402	0.0246	0.0226	0.1066	-0.0256	-0.1435	-0.7964
0.1882	0.9770	-0.0516	-0.0834	0.0269	0.0328	0.1252	-0.0008	-0.6005	-1.4280
0.2353	0.9842	0.0129	-0.1891	0.0344	0.0404	0.1526	0.2316	-1.8291	-2.7626
0.2824	1.0214	0.0794	-0.2274	0.0326	0.0449	0.1427	0.4633	-1.6831	-2.4240
0.3294	1.0443	0.1285	-0.2324	0.0187	0.0279	0.0895	-0.0628	-0.1957	-1.1255
0.3765	1.0445	0.1627	-0.2091	0.0168	0.0244	0.0800	-0.0430	-0.2273	-1.0164
0.4235	1.0411	0.1828	-0.1839	0.0169	0.0212	0.0807	-0.0328	-0.1609	-1.0823
0.4706	1.0373	0.1951	-0.1560	0.0171	0.0206	0.0820	0.0056	-0.3501	-1.1485
0.5176	1.0335	0.2042	-0.1371	0.0175	0.0216	0.0828	-0.0289	-0.1990	-1.2025
0.6118	1.0276	0.2111	-0.1014	0.0174	0.0206	0.0826	-0.0152	-0.1888	-1.2224

Run#: 065	M = 1.200	U∞= 367.3 m/s
NOSE: BLUNT	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2353	1.0362	0.1681	0.1752	0.0163	0.0251	0.0741	-0.0962	-0.3695	-0.8945
-0.1882	1.0348	0.1565	0.1744	0.0173	0.0365	0.0820	-0.0556	-0.3939	-0.7212
-0.1412	1.0086	0.1246	0.1142	0.0361	0.0545	0.1503	1.2607	2.7637	2.2742
-0.0941	1.0330	0.1784	0.1695	0.0161	0.0149	0.0739	0.0171	-0.1251	-0.9109
-0.0471	1.0337	0.1785	0.1662	0.0171	0.0149	0.0778	0.0217	-0.1510	-1.0673
0.0000	1.0338	0.1786	0.1664	0.0163	0.0148	0.0777	0.0117	-0.1611	-1.0940
0.0471	1.0331	0.1785	0.1698	0.0154	0.0148	0.0733	0.0084	-0.1440	-0.9574
0.0941	1.0249	-0.0661	0.0228	0.0199	0.0257	0.0903	-0.0468	-0.1547	-0.8955
0.1412	0.9981	-0.0752	0.0332	0.0241	0.0249	0.1087	-0.0161	-0.2228	-0.9029
0.1882	0.9457	-0.0694	0.0203	0.0291	0.0360	0.1314	-0.1473	-0.1020	-0.7237
0.2353	0.9220	-0.0206	-0.1048	0.0344	0.0590	0.1562	-0.2138	-1.4431	-2.4146
0.2824	0.9631	0.0627	-0.2488	0.0469	0.0643	0.2122	0.0058	-2.6149	-3.2411
0.3294	1.0327	0.1340	-0.2384	0.0339	0.0481	0.1504	-0.2220	-0.2977	-1.6414
0.3765	1.0463	0.1692	-0.2244	0.0204	0.0368	0.0920	-0.1969	-0.2106	-1.2580
0.4235	1.0441	0.1875	-0.1954	0.0184	0.0358	0.0848	-0.1425	-0.2845	-1.1574
0.4706	1.0412	0.1879	-0.1638	0.0204	0.0619	0.0852	-0.5796	-0.2747	-1.1956
0.5176	1.0436	0.1572	-0.1419	0.0250	0.0990	0.0878	-1.6474	-0.2837	-1.2924

Run#: 067	M = 1.200	U∞=370.6 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
REM : 9830	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2353	1.0363	0.0858	0.2965	0.0196	0.0269	0.0931	-0.0083	-0.4774	-1.1393
-0.1882	1.0037	0.0468	0.4031	0.0235	0.0323	0.1087	-0.0639	-0.3104	-0.8124
-0.1412	0.9331	-0.0276	0.1868	0.0400	0.0342	0.2106	-0.0683	1.8190	3.0572
-0.1294	0.9475	-0.0463	0.0258	0.0446	0.0360	0.2315	-0.1809	1.4228	-3.1379
-0.1176	0.9524	-0.0569	-0.0913	0.0453	0.0353	0.2226	-0.2033	0.8066	-4.6271
-0.0941	0.9827	-0.0775	-0.2224	0.0337	0.0332	0.1490	-0.1620	0.3662	-1.5823
-0.0471	1.0148	-0.0825	-0.1293	0.0279	0.0298	0.1229	-0.1048	0.1603	-0.6283
0.0000	1.0336	-0.0756	-0.0096	0.0224	0.0274	0.1016	-0.0938	-0.0085	-0.8872
0.0235	1.0197	-0.0460	-0.0667	0.0219	0.0250	0.1094	-0.0547	-0.1890	-1.1240
0.0471	1.0236	-0.0436	-0.0132	0.0232	0.0289	0.1048	-0.0456	-0.2711	-0.9526
0.0706	1.0328	-0.0445	0.0631	0.0204	0.0241	0.0980	-0.0366	-0.1022	-1.1674
0.0941	1.0307	-0.0422	0.1116	0.0203	0.0267	0.0958	-0.0537	-0.2030	-0.8957
0.1176	1.0261	-0.0461	0.1504	0.0202	0.0229	0.0903	-0.0290	-0.1621	-0.9839
0.1412	1.0156	-0.0445	0.2034	0.0234	0.0264	0.1061	-0.0461	-0.2155	-1.1902
0.1647	0.9950	-0.0453	0.2056	0.0240	0.0276	0.1114	-0.0310	-0.1700	-1.0688
0.1765	0.9476	-0.0518	0.1280	0.0282	0.0310	0.1438	0.0284	-0.7099	-1.8380
0.1882	0.9744	-0.0366	0.1944	0.0280	0.0344	0.1287	-0.0505	-0.2593	-1.4436
0.2000	0.9488	-0.0256	-0.0419	0.0367	0.0352	0.1866	0.1186	-1.4477	-4.4578
0.2118	0.9668	0.0089	0.0672	0.0319	0.0501	0.1607	0.1733	-2.6151	-3.1332
0.2235	0.9613	0.0177	-0.2531	0.0373	0.0475	0.1819	0.0229	-1.8631	-4.5702
0.2353	0.9733	0.0634	-0.0561	0.0378	0.0558	0.1905	0.1056	-2.7958	-5.0279
0.2588	0.9834	0.1159	-0.2132	0.0338	0.0415	0.1666	-0.0354	-0.4712	-3.6294
0.2824	0.9872	0.1439	-0.2837	0.0356	0.0417	0.1733	0.0120	-1.0371	-3.8922
0.3059	1.0054	0.1668	-0.3379	0.0279	0.0302	0.1384	0.0021	-0.3724	-1.0174
0.3294	1.0061	0.1791	-0.3421	0.0312	0.0321	0.1596	-0.0237	-0.4510	-2.0432
0.3765	1.0185	0.2036	-0.2767	0.0309	0.0294	0.1543	0.0374	-0.3623	-2.1683
0.4235	1.0322	0.2219	-0.1638	0.0195	0.0233	0.0946	-0.0490	-0.1817	-1.0831
0.5176	1.0263	0.2369	-0.1037	0.0196	0.0225	0.0941	-0.0145	-0.3262	-1.4401
0.6118	1.0212	0.2396	-0.0811	0.0218	0.0231	0.1048	-0.0263	-0.3043	-1.7877

Run#: 068	M = 1.200	U∞=370.5 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0299	0.1837	0.1400	0.0125	0.0137	0.0597	0.0036	-0.1203	-0.5365
-0.4706	1.0315	0.1756	0.1462	0.0125	0.0125	0.0598	0.0021	-0.1002	-0.5362
-0.4235	1.0333	0.1677	0.1548	0.0124	0.0144	0.0579	-0.0133	-0.0611	-0.5363
-0.3765	1.0376	0.1548	0.1604	0.0127	0.0152	0.0588	-0.0203	-0.0671	-0.5598
-0.3294	1.0420	0.1380	0.1681	0.0124	0.0151	0.0565	-0.0169	-0.0891	-0.4942
-0.2824	1.0467	0.1169	0.1698	0.0129	0.0162	0.0589	-0.0282	-0.0455	-0.5448
-0.2353	1.0526	0.0924	0.1668	0.0126	0.0168	0.0622	-0.0279	-0.0459	-0.5833
-0.1882	1.0553	0.0656	0.1706	0.0132	0.0177	0.0630	-0.0238	-0.0959	-0.5722
-0.1412	1.0459	0.0411	0.1921	0.0157	0.0184	0.0761	-0.0025	-0.2437	-0.7844
-0.0941	1.0339	0.0209	0.2787	0.0150	0.0209	0.0734	-0.0336	-0.2354	-0.9254
-0.0706	1.0133	0.0046	0.1701	0.0213	0.0212	0.1085	-0.0133	0.0506	-0.6678
-0.0588	1.0119	-0.0042	0.1255	0.0212	0.0216	0.1033	-0.0149	0.116[illegible]	-0.7264
-0.0471	1.0162	-0.0212	0.0414	0.0207	0.0203	0.1021	-0.0185	0.015[illegible]	-0.7499
0.0000	1.0397	-0.0429	-0.0090	0.0153	0.0158	0.0733	-0.0085	-0.1197	-0.5989
0.0471	1.0448	-0.0473	-0.0305	0.0147	0.0145	0.0708	0.0000	-0.0991	-0.7182
0.0941	1.0441	-0.0407	-0.0849	0.0156	0.0171	0.0757	-0.0032	-0.1653	-0.8560
0.1412	1.0440	-0.0079	-0.1520	0.0166	0.0237	0.0782	-0.0359	-0.2686	-0.9970
0.1882	1.0460	0.0391	-0.1952	0.0155	0.0221	0.0761	-0.0325	-0.2007	-0.8902
0.2353	1.0465	0.0796	-0.2051	0.0154	0.0200	0.0727	-0.0218	-0.2178	-0.8438
0.2824	1.0441	0.1180	-0.1984	0.0156	0.0181	0.0768	-0.0028	-0.1976	-0.9366
0.3294	1.0400	0.1508	-0.1828	0.0163	0.0196	0.0794	-0.0229	-0.1668	-1.0139
0.3765	1.0360	0.1728	-0.1575	0.0162	0.0196	0.0800	-0.0020	-0.2688	-1.0343

Run#: 072	M 1.200	U∞=369.6 m/s
NOSE:BLUNT	X = 5.000 cal	α = 10 °
RFM : 9830	Y 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4706	1.0182	0.1672	0.0984	0.0140	0.0165	0.0667	-0.0233	-0.0618	-0.6547
-0.4235	1.0183	0.1582	0.0993	0.0141	0.0172	0.0658	-0.0187	-0.1005	-0.6658
-0.3765	1.0179	0.1484	0.0973	0.0139	0.0178	0.0648	-0.0274	-0.0776	-0.6423
-0.3294	1.0198	0.1356	0.0976	0.0141	0.0179	0.0670	-0.0299	-0.0645	-0.6973
-0.2824	1.0225	0.1205	0.0940	0.0139	0.0178	0.0662	-0.0296	-0.0931	-0.6825
-0.2353	1.0245	0.1049	0.0868	0.0141	0.0180	0.0682	-0.0278	-0.0741	-0.7353
-0.1882	1.0249	0.0871	0.0821	0.0141	0.0179	0.0667	-0.0284	-0.0716	-0.7352
-0.1412	1.0270	0.0700	0.0697	0.0140	0.0179	0.0656	-0.0412	-0.0433	-0.7246
-0.0941	1.0292	0.0538	0.0522	0.0139	0.0180	0.0663	-0.0325	-0.0811	-0.7340
-0.0471	1.0282	0.0398	0.0333	0.0140	0.0159	0.0674	-0.0120	-0.1304	-0.7146
0.0000	1.0284	0.0291	-0.0019	0.0154	0.0177	0.0749	-0.0189	-0.1314	-0.8990
0.0471	1.0278	0.0260	-0.0359	0.0158	0.0177	0.0764	-0.0170	-0.1402	-0.9815
0.0941	1.0279	0.0297	-0.0705	0.0165	0.0177	0.0791	-0.0026	-0.2159	-1.0920
0.1412	1.0291	0.0423	-0.1085	0.0163	0.0200	0.0800	0.0080	-0.3250	-1.0626
0.1882	1.0277	0.0638	-0.1288	0.0163	0.0216	0.0790	-0.0114	-0.3018	-1.0371
0.2353	1.0267	0.0872	-0.1471	0.0162	0.0218	0.0806	-0.0247	-0.2628	-1.0250
0.2824	1.0252	0.1094	-0.1544	0.0160	0.0214	0.0786	-0.0008	-0.3182	-0.9280
0.3294	1.0222	0.1310	-0.1525	0.0162	0.0220	0.0786	-0.0182	-0.2199	-0.9268
0.3765	1.0207	0.1503	-0.1474	0.0161	0.0200	0.0785	-0.0175	-0.1892	-0.9360
0.4235	1.0190	0.1648	-0.1397	0.0160	0.0178	0.0791	0.0057	-0.2287	-0.9265
0.4706	1.0165	0.1752	-0.1298	0.0159	0.0167	0.0778	0.0132	-0.2369	-0.9416
0.5176	1.0153	0.1822	-0.1220	0.0160	0.0159	0.0773	-0.0059	-0.1628	-0.9309
0.5647	1.0136	0.1887	-0.1145	0.0165	0.0169	0.0757	-0.0079	-0.1643	-0.9363
0.6118	1.0113	0.1931	-0.1064	0.0163	0.0161	0.0766	0.0037	-0.1496	-0.9489
0.6588	1.0111	0.1972	-0.1042	0.0160	0.0173	0.0772	0.0031	-0.2127	-0.9271
0.7059	1.0097	0.1999	-0.0994	0.0158	0.0174	0.0791	0.0033	-0.2611	-0.9516

[illegible]	M [illegible]	U_∞ [illegible]
[illegible]	X [illegible]	α [illegible]
[illegible]	Y [illegible]	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
Z (in.)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000 \cdot \overline{U'V'}}{U_\infty^2}$	$\frac{1000 \cdot \overline{V'W'}}{U_\infty^2}$	$\frac{1000 \cdot \overline{W'U'}}{U_\infty^2}$
-0.4706	1.0153	0.1677	0.0997	0.0143	0.0177	0.0681	-0.0125	-0.1276	-0.6787
-0.4235	1.0163	0.1567	0.1050	[illegible]	0.0184	0.0675	-0.0214	-0.1010	-0.6384
-0.3765	1.0182	0.1459	0.1064	0.0139	0.0184	0.0668	-0.0160	-0.1220	-0.6671
-0.3294	1.0206	0.1321	0.1137	0.0151	0.0193	0.0721	-0.0259	-0.1159	-0.8088
-0.2824	1.0237	0.1141	0.1065	0.0140	0.0195	0.0660	-0.0448	-0.0490	-0.6805
-0.2353	1.0273	0.0935	0.1024	0.0142	0.0199	0.0659	-0.0400	-0.0968	-0.6945
-0.1882	1.0289	0.0718	0.0919	0.0140	0.0193	0.0671	-0.0506	0.0267	-0.7297
-0.1412	1.0304	0.0512	0.0740	0.0141	0.0202	0.0685	-0.0496	-0.0601	-0.7148
-0.0941	1.0205	0.0281	0.0451	0.0170	0.0202	0.0826	-0.0154	-0.1107	-0.5462
-0.0471	1.0165	0.0082	0.0173	0.0181	0.0226	0.0839	-0.0557	0.0718	-0.7817
0.0000	1.0239	-0.0068	-0.0222	0.0174	0.0185	0.0839	-0.0224	-0.1302	-1.1046
0.0471	1.0271	-0.0063	-0.0594	0.0165	0.0186	0.0783	-0.0101	-0.1786	-1.0368
0.0941	1.0298	0.0006	-0.0999	0.0166	0.0216	0.0801	-0.0066	-0.3100	-1.0971
0.1412	1.0301	0.0222	-0.1417	0.0162	0.0239	0.0785	-0.0401	-0.2763	-1.0077
0.1882	1.0300	0.0497	-0.1702	0.0162	0.0253	0.0802	-0.0171	-0.4086	-0.9839
0.2353	1.0270	0.0815	-0.1838	0.0161	0.0241	0.0776	-0.0254	-0.3294	-0.9358
0.2824	1.0272	0.1093	-0.1965	0.0171	0.0232	0.0824	-0.0316	-0.2389	-1.0540
0.3294	1.0242	0.1358	-0.1895	0.0166	0.0212	0.0798	-0.0184	-0.1716	-0.9863
0.3765	1.0212	0.1554	-0.1681	0.0167	0.0199	0.0814	-0.0071	-0.2369	-1.0260
0.4235	1.0201	0.1715	-0.1557	0.0164	0.0184	0.0787	-0.0171	-0.1511	-0.9519
0.4706	1.0173	0.1813	-0.1425	0.0163	0.0173	0.0775	0.0033	-0.2077	-0.9393
0.5176	1.0148	0.1908	-0.1245	0.0160	0.0176	0.0772	0.0078	-0.2195	-0.9186
0.5647	1.0125	0.1962	-0.1169	0.0161	0.0173	0.0783	-0.0086	-0.1391	-0.9506
0.6118	1.0116	0.2021	-0.1097	0.0162	0.0176	0.0780	-0.0167	-0.0944	-0.9446
[illegible]	1.0102	[illegible]	[illegible]	0.0162	0.0180	[illegible]	-0.0005	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0165	[illegible]	[illegible]	[illegible]	-0.2190	[illegible]

	[illegible]			RMS			SHEAR STRESS		
[illegible]	[illegible]	[illegible]	W/Uo	U'/Uo	V'/Uo	W'/Uo	1000*U'V'/Uo^2	1000*V'W'/Uo^2	[illegible]*W'U'/Uo^2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0164	0.0676	-0.0093	-0.0740	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0737	-0.0424	0.0036	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0212	0.0726	-0.0530	-0.0374	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0141	[illegible]	0.0669	-0.0541	-0.0539	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0146	[illegible]	0.0692	-0.0446	-0.0239	[illegible]
[illegible]	[illegible]	[illegible]	0.0753	[illegible]	0.0214	0.0954	-0.0098	0.0048	[illegible]
[illegible]	[illegible]	[illegible]	0.0288	0.0279	0.0262	0.1301	0.0342	0.1382	[illegible]
[illegible]	[illegible]	[illegible]	-0.0184	0.0283	0.0279	0.1336	-0.1251	0.4626	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0190	0.0187	0.0890	-0.0229	-0.0652	[illegible]
[illegible]	[illegible]	[illegible]	-0.0719	0.0165	0.0181	0.0786	-0.0167	-0.1355	-0.8604
[illegible]	[illegible]	-0.0411	[illegible]	0.0186	0.0242	0.0893	-0.0230	-0.3198	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0187	0.0309	0.0906	-0.0487	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0188	0.0317	0.0899	-0.0798	-0.4141	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0176	0.0298	0.0848	-0.0810	-0.3624	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0167	0.0260	0.0814	-0.0439	-0.2793	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0173	0.0234	0.0825	-0.0216	-0.2822	[illegible]
[illegible]	[illegible]	[illegible]	-0.2026	0.0168	0.0207	0.0812	-0.0162	-0.2338	[illegible]
[illegible]	[illegible]	[illegible]	-0.1812	0.0168	0.0174	0.0806	0.0159	-0.2306	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.0169	0.0179	0.0795	-0.0057	-0.1896	[illegible]
[illegible]	[illegible]	[illegible]	-0.1346	0.0162	0.0188	0.0794	-0.0036	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	-0.1175	0.0166	0.0180	0.0808	-0.0055	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0186	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0788	-0.0071	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	M	1.000	Uoo 370.2 m/s
[illegible]	X	5.000 cal	α 10 °
[illegible]	Z	0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U_{oo}}$	$\frac{\overline{V}}{U_{oo}}$	$\frac{\overline{W}}{U_{oo}}$	$\frac{\overline{U'}}{U_{oo}}$	$\frac{\overline{V'}}{U_{oo}}$	$\frac{\overline{W'}}{U_{oo}}$	$\frac{1000*\overline{U'V'}}{U_{oo}^2}$	$\frac{1000*\overline{V'W'}}{U_{oo}^2}$	$\frac{1000*\overline{W'U'}}{U_{oo}^2}$
[illegible]	1.0156	0.0058	-0.1384	0.0639	0.0169	0.3084	0.1780	-1.4447	-14.0675
[illegible]	0.9930	-0.0492	-0.0984	0.0786	0.1074	0.3140	-0.1020	-1.9271	-18.4058
[illegible]	0.9325	-0.0551	0.1406	0.0452	0.0442	0.1732	0.0889	0.7114	-0.6236
[illegible]	0.9787	-0.0418	0.1958	0.0459	0.0413	0.1340	0.3861	0.9098	-0.2457
[illegible]	1.0117	-0.0349	0.1656	0.0303	0.0397	0.1195	0.1552	0.2837	-0.2198
[illegible]	1.0356	-0.0323	0.1904	0.0189	0.0333	0.0809	0.0617	0.2005	-0.7662
[illegible]	1.0467	-0.0450	0.1551	0.0166	0.0309	0.0800	-0.0436	0.0631	-0.9989
[illegible]	1.0373	-0.0353	0.1130	0.0166	0.0255	0.0761	-0.0284	-0.1385	-0.8429

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Plan
[illegible]	1.2	10	BLUNT	9830	5.50	-60	Y
81	1.2	10	BLUNT	9830	5.50	-30	Y
82	1.2	10	BLUNT	9830	5.50	0	Y
83	1.2	10	BLUNT	9830	5.50	0	Y
84	1.2	10	BLUNT	9830	5.50	0	Y
85	1.2	10	BLUNT	9830	5.50	0	Y
86	1.2	10	BLUNT	9830	5.50	30	Y
133	1.2	10	BLUNT	9830	5.50	60	Y

Run#: 123	M 1.200		U_∞=370.2 m/s
NOSE:BLUNT	X 5.500 cal		α = 10 °
RPM : 9830	Z 0.000 cal		δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y/Yref	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0115	0.7142	-0.1039	0.3191	0.0558	0.0304	0.2059	-0.4617	1.2436	-4.9761
0.0176	0.7351	-0.1230	0.3034	0.0621	0.0332	0.1823	-0.0382	1.9004	2.8267
0.0235	0.8048	-0.1151	0.3285	0.0587	0.0436	0.1769	0.2424	0.7844	-0.2878
0.0294	0.8047	-0.1159	0.3236	0.0550	0.0383	0.1387	0.3968	1.2350	-0.1721
0.0353	0.8156	-0.1140	0.2475	0.0653	0.0420	0.2239	0.7336	0.4545	-2.1058
0.0412	0.8043	-0.1193	0.1321	0.0684	0.0400	0.2375	0.1241	0.9422	-7.0546
0.0471	0.8032	-0.1145	0.0813	0.0594	0.0441	0.2330	-0.4920	2.9925	-6.7565
0.0529	0.8183	-0.1115	0.0031	0.0683	0.0454	0.2354	-0.5291	1.3424	-9.1610
0.0588	0.8524	-0.1118	-0.0405	0.0678	0.0445	0.2176	-0.8015	1.9367	-7.5734
0.0647	0.8809	-0.1134	-0.0826	0.0686	0.0411	0.1855	-0.7007	1.2295	-5.5899
0.0706	0.9226	-0.1104	-0.1292	0.0640	0.0417	0.1831	-0.5885	0.8078	-4.9260
0.0824	1.0069	-0.1056	-0.1789	0.0544	0.0359	0.1413	-0.2580	0.5692	-3.6922
0.0941	1.0701	-0.1031	-0.1949	0.0368	0.0283	0.1306	-0.0814	0.2419	-2.6551
0.1059	1.1145	-0.1007	-0.1594	0.0223	0.0249	0.1084	-0.0322	0.1675	-2.3164
0.1176	1.1017	-0.1111	-0.1978	0.0237	0.0238	0.1104	0.0120	0.2173	-2.0061
0.1412	1.1111	-0.1115	-0.1927	0.0221	0.0266	0.1152	-0.0273	0.2146	-2.4283

RUN#: 057	M = 1.200	U∞ = 371.8 m/s
NOSE: BLUNT	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0878	0.1301	0.1881	0.0173	0.0223	0.0810	0.0855	-0.2841	-1.1594
-0.3765	1.0815	0.1130	0.1960	0.0156	0.0157	0.0772	0.0033	-0.1923	-0.9976
-0.3294	1.0807	0.0969	0.2058	0.0156	0.0161	0.0753	-0.0033	-0.1584	-0.9745
-0.2824	1.0797	0.0811	0.2148	0.0162	0.0163	0.0769	-0.0016	-0.1735	-1.0550
-0.2353	1.0758	0.0623	0.2206	0.0158	0.0155	0.0754	0.0106	-0.2137	-0.9963
-0.1882	1.0535	0.0386	0.2146	0.0161	0.0180	0.0753	0.0032	-0.2284	-0.9206
-0.1647	1.0487	0.0286	0.2261	0.0201	0.0191	0.0959	0.0116	-0.2754	-1.5002
-0.1412	1.0231	0.0075	0.2237	0.0227	0.0240	0.1056	0.0148	-0.1961	-1.0167
-0.0941	0.9846	-0.0479	0.1753	0.0239	0.0289	0.1093	0.0091	-0.2705	-1.0198
-0.0706	0.9828	-0.0833	0.1461	0.0245	0.0280	0.1112	-0.0076	-0.0777	-1.5304
-0.0471	0.9847	-0.1128	0.0735	0.0261	0.0270	0.1183	-0.1230	0.0872	-1.9010
-0.0235	1.0206	-0.1412	0.0436	0.0278	0.0266	0.1191	-0.1900	0.1251	-1.8929
0.0000	1.0486	-0.1668	0.0175	0.0205	0.0270	0.0935	-0.1249	-0.0827	-1.4185
0.0471	1.0595	-0.1908	-0.0283	0.0158	0.0223	0.0745	-0.0331	-0.1774	-0.8996
0.0941	1.0538	-0.1990	-0.0696	0.0161	0.0214	0.0760	-0.0387	-0.1232	-0.9519
0.1176	1.0477	-0.1971	-0.1012	0.0170	0.0225	0.0850	-0.0285	-0.2811	-1.0108
0.1412	1.0461	-0.1931	-0.1343	0.0188	0.0238	0.0925	-0.0358	-0.3215	-1.3379
0.1647	1.0413	-0.1713	-0.1712	0.0209	0.0312	0.0986	-0.0456	-0.6026	-1.3943
0.1882	1.0399	-0.1471	-0.2158	0.0228	0.0358	0.1107	-0.0428	-0.8359	-1.9016
0.2353	1.0527	-0.0376	-0.3549	0.0230	0.0495	0.1087	-0.1034	-1.1756	-1.6782
0.2588	1.0646	0.0242	-0.3723	0.0203	0.0460	0.0985	-0.0351	0.1967	-0.9348
0.2824	1.0710	0.0499	-0.3779	0.0176	0.0338	0.0830	-0.1037	-0.2187	-0.9441
0.3294	1.0769	0.0985	-0.3513	0.0161	0.0249	0.0762	-0.0617	-0.1013	-0.8693
0.3765	1.0773	0.1268	-0.3276	0.0150	0.0219	0.0714	-0.0438	-0.1744	-0.8162
0.4235	1.0778	0.1459	-0.2902	0.0153	0.0197	0.0728	-0.0372	-0.1120	-0.9051
0.4706	1.0779	0.1547	-0.2660	0.0148	0.0194	0.0698	-0.0284	-0.1447	-0.8347
0.5647	1.0800	0.1644	-0.2323	0.0149	0.0198	0.0711	-0.0363	-0.1649	-0.8477
0.7059	1.0824	0.1662	-0.2186	0.0150	0.0209	0.0712	-0.0372	-0.1021	-0.8058

RUN#: 58A	M = 1.200	U∞=369.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{U'W'}}{U\infty^2}$
-0.2824	1.0806	0.0990	0.2490	0.0167	0.0193	0.0818	0.0007	-0.3082	-1.1091
-0.2353	1.0625	0.0808	0.2715	0.0187	0.0196	0.0893	-0.0039	-0.2430	-1.3910
-0.1882	1.0332	0.0644	0.3222	0.0247	0.0218	0.1205	0.0239	-0.3271	-2.0140
-0.1412	0.9331	0.0127	0.2021	0.0391	0.0314	0.1864	0.1025	0.3150	2.7848
-0.0941	0.9536	-0.0648	0.1923	0.0316	0.0333	0.1450	-0.1630	0.4720	-1.3722
-0.0941	0.9360	-0.0628	0.2720	0.0266	0.0320	0.1214	-0.1661	0.2879	0.2372
-0.0471	1.0100	-0.1343	0.1471	0.0303	0.0301	0.1376	-0.2346	0.3993	-2.8855
-0.0471	1.0219	-0.1161	0.0861	0.0244	0.0280	0.1116	-0.1197	-0.0242	-1.7102
0.0000	1.0517	-0.1546	0.0428	0.0157	0.0298	0.0702	-0.1356	-0.0499	-0.6636
0.0000	1.0519	-0.1707	0.0666	0.0187	0.0261	0.0884	-0.0825	-0.1142	-1.1695
0.0471	1.0534	-0.1900	0.0394	0.0158	0.0224	0.0753	-0.0588	-0.1337	-0.7841
0.0941	1.0437	-0.2052	0.0380	0.0166	0.0230	0.0788	-0.0481	-0.2250	-0.9013
0.1412	1.0171	-0.2162	0.0283	0.0192	0.0222	0.0882	-0.0402	-0.2214	-0.8623
0.1882	0.9829	-0.2111	0.0038	0.0225	0.0238	0.1043	-0.0166	-0.2137	-0.7280
0.2118	0.9699	-0.1911	-0.0485	0.0243	0.0326	0.1179	-0.0890	-0.4285	-0.9880
0.2353	0.9750	-0.1489	-0.1076	0.0323	0.0527	0.1527	-0.1122	-1.2761	-1.9520
0.2824	1.0536	0.0411	-0.1986	0.0401	0.1008	0.2005	-0.2486	-4.8111	-3.3307
0.2824	1.0717	0.0307	-0.1485	0.0363	0.0902	0.1855	-0.1999	-5.4813	-4.6297
0.3294	1.0824	0.1464	-0.2761	0.0211	0.0336	0.0981	-0.0655	-0.3052	-1.0543
0.3765	1.0857	0.1676	-0.2961	0.0166	0.0213	0.0799	-0.0257	-0.1428	-0.7800
0.4235	1.0898	0.1739	-0.2871	0.0158	0.0194	0.0753	-0.0184	-0.1684	-0.7150

Run#: 083	M = 2.250	U∞ = 369.6 m/s
NOSE:BLUNT	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3765	1.0972	0.1128	0.2558	0.0147	0.0151	0.0717	-0.0050	-0.1153	-0.3969
-0.3294	1.0929	0.0979	0.2589	0.0140	0.0150	0.0681	0.0061	-0.1714	-0.8100
-0.2824	1.0865	0.0818	0.2518	0.0138	0.0144	0.0656	-0.0022	-0.1354	-0.7197
-0.2353	1.0636	0.0613	0.2323	0.0182	0.0181	0.0898	0.0066	-0.1338	-0.5384
-0.2118	1.0564	0.0544	0.2560	0.0193	0.0158	0.0865	0.0281	-0.0712	-0.5059
-0.1882	1.0329	0.0373	0.2823	0.0261	0.0254	0.1246	0.0710	-0.4970	-1.6421
-0.1412	0.9820	-0.0215	0.2589	0.0300	0.0378	0.1350	0.0029	-0.2120	-0.1791
-0.1176	0.9546	-0.0627	0.1822	0.0251	0.0314	0.1174	-0.0672	0.1367	0.4848
-0.0941	0.9634	-0.1019	0.1771	0.0305	0.0316	0.1370	-0.1386	0.7010	-0.0708
-0.0706	0.9953	-0.1269	0.1681	0.0324	0.0287	0.1501	-0.1460	0.5945	-1.6016
-0.0471	1.0362	-0.1498	0.1335	0.0294	0.0284	0.1323	-0.1658	0.3292	-2.7157
-0.0235	1.0536	-0.1667	0.0800	0.0249	0.0264	0.1167	-0.1253	0.1736	-1.9339
0.0000	1.0621	-0.1810	0.0477	0.0207	0.0258	0.0963	-0.0788	-0.0516	-1.2996
0.0471	1.0626	-0.1974	0.0158	0.0144	0.0221	0.0673	-0.0688	-0.0403	-0.6922
0.0941	1.0447	-0.2142	-0.0018	0.0170	0.0214	0.0791	-0.0443	-0.1363	-0.8862
0.1412	1.0278	-0.2080	-0.0245	0.0183	0.0252	0.0881	-0.0545	-0.2496	-0.8970
0.1882	1.0107	-0.1681	-0.1152	0.0238	0.0335	0.1169	-0.0245	-0.7879	-1.4653
0.2118	1.0186	-0.1158	-0.2507	0.0287	0.0407	0.1286	0.0066	-0.7563	-2.1135
0.2353	1.0383	-0.0507	-0.2692	0.0331	0.0604	0.1579	0.1957	-2.7346	-2.7128
0.2588	1.0765	0.0180	-0.2848	0.0242	0.0481	0.1091	-0.1494	-0.5468	-1.1379
0.2824	1.0798	0.0861	-0.3119	0.0219	0.0417	0.1021	-0.1118	-0.5415	-0.9214
0.3294	1.0914	0.1309	-0.2978	0.0169	0.0251	0.0800	-0.0681	-0.1585	-1.0275
0.3765	1.0926	0.1510	-0.2911	0.0158	0.0210	0.0762	-0.0233	-0.2086	-0.9448
0.4235	1.0919	0.1641	-0.2665	0.0155	0.0176	0.0756	0.0006	-0.1908	-0.9643
0.4706	1.0923	0.1709	-0.2414	0.0155	0.0167	0.0738	-0.0135	-0.1303	-0.9343
0.5176	1.0933	0.1739	-0.2215	0.0153	0.0165	0.0739	-0.0019	-0.1621	-0.9429
0.5647	1.0936	0.1750	-0.2086	0.0146	0.0166	0.0715	-0.0034	-0.1996	-0.8609
0.6118	1.0967	0.1687	-0.1967	0.0138	0.0237	0.0708	-0.0135	-0.3873	-0.7825

Run #: [illegible]	M = 1.200	U∞ 368.9 m/s
NOSE: BLUNT	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z/R cal	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.1069	0.1412	0.2205	0.0143	0.0177	0.0689	-0.0170	-0.1708	-0.8271
-0.4706	1.1076	0.1329	0.2427	0.0143	0.0184	0.0681	-0.0185	-0.1390	-0.7973
-0.4235	1.1059	0.1231	0.2467	0.0142	0.0176	0.0694	-0.0115	-0.1656	-0.8056
-0.3765	1.1051	0.1112	0.2409	0.0144	0.0173	0.0688	-0.0102	-0.1574	-0.7924
-0.3294	1.1020	0.0965	0.2449	0.0147	0.0198	0.0688	-0.0210	-0.1683	-0.8211
-0.2824	1.1024	0.0801	0.2498	0.0144	0.0196	0.0684	-0.0202	-0.1438	-0.8244
-0.2353	1.0992	0.0567	0.2528	0.0146	0.0253	0.0665	-0.0708	-0.1867	-0.7854
-0.1882	1.0897	0.0336	0.2554	0.0147	0.0254	0.0679	-0.0814	-0.1736	-0.7173
-0.1647	1.0653	0.0199	0.2099	0.0135	0.0207	0.0684	-0.0175	-0.1088	-0.4242
-0.1412	1.0667	0.0115	0.2330	0.0158	0.0219	0.0726	-0.0471	-0.0958	-0.0872
-0.1176	1.0480	-0.0098	0.1868	0.0193	0.0208	0.0891	-0.0364	-0.1301	0.0137
-0.0941	1.0187	-0.0232	0.1555	0.0239	0.0237	0.1087	-0.0438	-0.0549	0.6945
-0.0706	1.0153	-0.0579	0.1586	0.0188	0.0220	0.0898	-0.0236	-0.1195	-0.1532
-0.0471	1.0164	-0.0902	0.1374	0.0290	0.0543	0.1267	-0.8376	2.7296	-1.0939
-0.0235	1.0612	-0.1427	0.1083	0.0221	0.0411	0.0985	-0.3300	0.2056	-1.7983
0.0000	1.0720	-0.1662	0.0171	0.0215	0.0470	0.0973	-0.4522	0.7016	-1.1400
0.0471	1.0798	-0.1776	-0.0432	0.0162	0.0303	0.0758	-0.1299	-0.0405	-0.9383
0.0941	1.0744	-0.1847	-0.0837	0.0159	0.0259	0.0729	-0.0713	-0.2138	-0.8547
0.1412	1.0723	-0.1802	-0.1513	0.0164	0.0273	0.0780	-0.0685	-0.2276	-0.9505
0.1882	1.0762	-0.1422	-0.2413	0.0180	0.0386	0.0839	-0.1211	-0.4663	-0.9871
0.2353	1.0930	-0.0562	-0.2948	0.0197	0.0452	0.0881	-0.2352	-0.2589	-0.9207
0.2824	1.1020	0.0273	-0.2993	0.0166	0.0380	0.0797	-0.1797	-0.4086	-0.7642
0.3294	1.1022	0.0813	-0.3053	0.0156	0.0245	0.0739	-0.0514	-0.2538	-0.7942
0.3765	1.1023	0.1124	-0.2745	0.0150	0.0201	0.0728	-0.0300	-0.1879	-0.8155
0.4235	1.0996	0.1352	-0.2527	0.0153	0.0212	0.0701	-0.0500	-0.0969	-0.8287
0.4706	1.0989	0.1479	-0.2327	0.0153	0.0211	0.0729	-0.0494	-0.1047	-0.8900
0.5176	1.0990	0.1551	-0.2116	0.0151	0.0202	0.0726	-0.0287	-0.2346	-0.9020
0.5647	1.1005	0.1600	-0.2006	0.0157	0.0210	0.0736	-0.0414	-0.1824	-0.9757

[illegible]	M 1.200	U∞ [illegible]
NOSE:BLUNT	X 5.500 cal	α
RPM : 9630	Y 0.141 cal	δ -

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0989	0.1250	0.1898	0.0145	0.0157	0.0685	-0.0132	-0.1505	-0.8524
-0.4706	1.0885	0.1160	0.1892	0.0153	0.0158	0.0745	-0.0062	-0.1341	-0.9649
-0.4235	1.0918	0.1043	0.1944	0.0148	0.0160	0.0731	-0.0019	-0.1603	-0.9131
-0.3765	1.0906	0.0917	0.2015	0.0156	0.0159	0.0734	-0.0128	-0.1452	-0.9809
-0.3294	1.0929	0.0763	0.2051	0.0153	0.0160	0.0738	-0.0047	-0.1600	-0.9747
-0.2824	1.0926	0.0590	0.2047	0.0151	0.0167	0.0713	-0.0225	-0.0881	-0.9020
-0.2353	1.0919	0.0355	0.1911	0.0150	0.0173	0.0735	-0.0031	-0.2087	-0.9571
-0.1882	1.0857	0.0075	0.1725	0.0148	0.0180	0.0695	-0.0276	-0.1066	-0.8810
-0.1412	1.0779	-0.0241	0.1436	0.0151	0.0185	0.0710	-0.0270	-0.1034	-0.8924
-0.0941	1.0640	-0.0497	0.1102	0.0158	0.0201	0.0735	-0.0309	-0.1427	-0.7014
-0.0471	1.0552	-0.0883	0.0924	0.0154	0.0285	0.0682	-0.1137	-0.1394	-0.6850
0.0000	1.0682	-0.1270	0.0221	0.0176	0.0286	0.0828	-0.1338	-0.0040	-1.2696
0.0471	1.0779	-0.1395	-0.0603	0.0160	0.0231	0.0766	-0.0457	-0.1845	-1.0781
0.0941	1.0795	-0.1350	-0.1213	0.0161	0.0224	0.0752	-0.0413	-0.2085	-1.0569
0.1412	1.0836	-0.1174	-0.1852	0.0154	0.0256	0.0732	-0.0544	-0.3004	-0.9541
0.1882	1.0900	-0.0760	-0.2368	0.0153	0.0256	0.0719	-0.0357	-0.3328	-0.8857
0.2353	1.0931	-0.0270	-0.2549	0.0159	0.0240	0.0758	-0.0276	-0.3206	-0.9558
0.2824	1.0961	0.0235	-0.2649	0.0151	0.0240	0.0748	-0.0252	-0.2887	-0.9158
0.3294	1.0975	0.0637	-0.2642	0.0160	0.0228	0.0759	-0.0353	-0.2214	-1.0154
0.3765	1.0986	0.0914	-0.2561	0.0155	0.0217	0.0771	-0.0344	-0.1585	-1.0105
0.4706	1.0969	0.1258	-0.2178	0.0157	0.0215	0.0757	-0.0345	-0.1795	-0.9844
0.5647	1.0960	0.1449	-0.1957	0.0157	0.0229	0.0746	-0.0313	-0.2499	-0.9948

Run#: [illegible]	M = 1.200	Uoo=371.7 m/s
NOSE:BLUNT	X = -5.500 cal	α = 10 °
RUN : 9830	Y = 0.198 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
X (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0961	0.1137	0.1681	0.0145	0.0159	0.0705	-0.0067	-0.1497	-0.8609
-0.4706	1.0943	0.1062	0.1709	0.0149	0.0160	0.0712	-0.0151	-0.1248	-0.8795
-0.4235	1.0936	0.0972	0.1667	0.0149	0.0164	0.0713	-0.0130	-0.1395	-0.9085
-0.3765	1.0891	0.0826	0.1634	0.0155	0.0166	0.0728	-0.0123	-0.1473	-0.9757
-0.3294	1.0905	0.0656	0.1678	0.0157	0.0158	0.0741	-0.0052	-0.1382	-1.0134
-0.2824	1.0935	0.0466	0.1696	0.0155	0.0171	0.0734	-0.0098	-0.1862	-0.9746
-0.2353	1.0931	0.0266	0.1642	0.0153	0.0172	0.0734	-0.0142	-0.1460	-0.9733
-0.1882	1.0912	0.0024	0.1464	0.0155	0.0164	0.0728	-0.0158	-0.1357	-0.9950
-0.1412	1.0825	-0.0202	0.1048	0.0153	0.0164	0.0730	-0.0062	-0.1640	-0.9486
-0.0941	1.0720	-0.0413	0.0609	0.0150	0.0156	0.0703	-0.0055	-0.1389	-0.8662
-0.0471	1.0642	-0.0638	0.0300	0.0158	0.0179	0.0746	-0.0201	-0.1561	-0.9841
0.0000	1.0687	-0.0880	-0.0161	0.0161	0.0207	0.0756	-0.0649	-0.0459	-1.0997
0.0471	1.0764	-0.0959	-0.0718	0.0153	0.0199	0.0731	-0.0208	-0.2248	-0.9931
0.0941	1.0807	-0.0868	-0.1293	0.0150	0.0203	0.0718	-0.0130	-0.2692	-0.9430
0.1412	1.0823	-0.0666	-0.1686	0.0138	0.0196	0.0681	-0.0156	-0.2714	-0.7842
0.1882	1.0847	-0.0390	-0.2037	0.0143	0.0185	0.0679	-0.0047	-0.2273	-0.7861
0.2353	1.0896	-0.0046	-0.2288	0.0156	0.0204	0.0747	-0.0133	-0.2633	-0.9666
0.2824	1.0965	0.0293	-0.2452	0.0152	0.0220	0.0750	-0.0133	-0.3345	-0.9314
0.3294	1.0975	0.0575	-0.2515	0.0151	0.0197	0.0735	-0.0252	-0.1500	-0.9277
0.3765	1.0964	0.0803	-0.2416	0.0158	0.0185	0.0753	-0.0185	-0.1710	-1.0081
0.4235	1.0955	0.0991	-0.2280	0.0154	0.0189	0.0763	-0.0139	-0.2227	-0.9766
0.4706	1.0944	0.1139	-0.2192	0.0155	0.0182	0.0752	-0.0106	-0.1894	-0.9863
0.5176	1.0915	0.1273	-0.2081	0.0160	0.0188	0.0749	-0.0366	-0.1041	-1.0244
0.5647	1.0913	0.1362	-0.2027	0.0158	0.0203	0.0762	-0.0176	-0.2401	-1.0306

Run#: 153	M 1.202	U_∞ 367.7 m/s
NOSE:SHORT	X 5.500 cal	α 10 °
RLM : 9860	Z 0.000 cal	δ 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0235	0.9435	-0.1173	0.0347	0.0446	0.1476	0.2110	-0.0971	0.0314	0.0962
0.0294	0.9966	-0.1477	0.0912	0.0447	0.0510	0.1947	-0.0328	-0.0690	1.4491
0.0353	1.0517	-0.1489	0.2293	0.0396	0.0385	0.1507	0.1733	0.2874	0.3590
0.0412	1.0848	-0.1436	0.2340	0.0350	0.0361	0.1482	0.0065	-0.1436	-0.3093
0.0471	1.0641	-0.1491	0.0570	0.0288	0.0386	0.1463	0.0089	-0.3416	-2.1975
0.0529	1.0817	-0.1490	0.0467	0.0229	0.0370	0.1167	0.0068	0.1418	-1.9277
0.0588	1.1279	-0.1501	0.1980	0.0214	0.0375	0.1067	0.0364	-0.0435	-1.6657
0.0706	1.1327	-0.1535	0.1911	0.0215	0.0350	0.1034	0.0592	-0.2038	-1.9207
0.0824	1.1336	-0.1509	0.1970	0.0191	0.0321	0.0919	0.0151	0.0015	-1.4964
0.0941	1.1335	-0.1512	0.1878	0.0180	0.0323	0.0864	0.0431	-0.0454	-1.2833
0.1176	1.1298	-0.1592	0.1614	0.0172	0.0336	0.0831	-0.0089	0.2768	-1.1513

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
127	1.2	10	SHARP	0	5.00	-60	Y
24	1.2	10	SHARP	0	5.00	0	Y
28	1.2	10	SHARP	0	5.00	0	Z
32	1.2	10	SHARP	0	5.00	0	Z
35	1.2	10	SHARP	0	5.00	0	Z
48	1.2	10	SHARP	0	5.00	0	Z
49	1.2	10	SHARP	0	5.00	0	Z
52	1.2	10	SHARP	0	5.00	0	Z
60	1.2	10	SHARP	0	5.00	0	Z
131	1.2	10	SHARP	0	5.00	60	Y

Run#: 137	M = 1.200	U∞=372.5 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RUN : 0000	Z 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0059	0.7507	-0.0583	-0.2986	0.0695	0.0292	0.3422	-0.2399	1.3780	-18.7691
0.0071	0.7668	-0.0618	-0.3237	0.0655	0.0273	0.3255	-0.2404	1.4774	-16.8394
0.0094	0.7784	-0.0620	-0.2243	0.0559	0.0277	0.2635	-0.1285	0.7501	-11.1410
0.0118	0.8006	-0.0640	-0.2205	0.0545	0.0282	0.2688	-0.1289	0.7266	-11.0426
0.0176	0.8644	-0.0697	-0.2123	0.0418	0.0262	0.1909	0.0185	0.2916	-4.0327
0.0235	0.9096	-0.0658	-0.1501	0.0318	0.0263	0.1440	-0.0031	0.1707	-1.5838
0.0294	0.9460	-0.0652	-0.1023	0.0300	0.0265	0.1331	-0.0191	0.1498	-1.5174
0.0353	0.9874	-0.0561	-0.0833	0.0250	0.0263	0.1161	0.0321	0.0017	-1.5860
0.0412	1.0133	-0.0660	-0.0845	0.0223	0.0262	0.1048	0.0440	-0.0979	-1.6385
0.0471	1.0350	-0.0642	-0.1167	0.0189	0.0253	0.0874	0.0042	0.0352	-1.2489
0.0529	1.0454	-0.0622	-0.1357	0.0172	0.0244	0.0827	0.0026	0.0354	-1.1328
0.0588	1.0485	-0.0613	-0.1459	0.0162	0.0237	0.0782	0.0065	0.0196	-1.0099
0.0647	1.0487	-0.0604	-0.1496	0.0167	0.0228	0.0797	0.0203	-0.0437	-1.0846
0.0706	1.0490	-0.0569	-0.1431	0.0169	0.0237	0.0806	0.0146	0.0179	-1.1280
0.0824	1.0466	-0.0540	-0.1369	0.0176	0.0220	0.0833	-0.0141	0.0851	-1.2072
0.0941	1.0454	-0.0509	-0.1316	0.0164	0.0226	0.0771	-0.0002	0.0546	-1.0169
0.1059	1.0447	-0.0487	-0.1328	0.0165	0.0226	0.0793	-0.0203	0.1104	-1.0663
0.1176	1.0437	-0.0468	-0.1234	0.0171	0.0221	0.0815	-0.0046	0.0453	-1.1539
0.1412	1.0416	-0.0429	-0.1177	0.0170	0.0216	0.0819	0.0179	-0.0278	-1.1463
0.1647	1.0409	-0.0395	-0.1068	0.0171	0.0224	0.0835	0.0162	-0.0160	-1.2095
0.1883	1.0367	-0.0274	-0.0940	0.0166	0.0208	0.0794	0.0106	-0.0370	-1.0772

[illegible]	M [illegible]	U_∞ 368.6 m/s	
[illegible]	X [illegible] cal	α [illegible]	
RUN [illegible]	Y 0.630 cal	δ [illegible]	

	VELOCITY			RMS			SHEAR STRESS		
Y	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
[illegible]	[illegible]	-0.0477	0.1257	0.0417	0.0266	0.2073	0.1051	-0.6525	-5.8138
[illegible]	[illegible]	-0.0506	0.0902	0.0254	0.0241	0.1124	0.0048	-0.2826	-1.3064
[illegible]	1.0013	-0.0663	0.0716	0.0134	0.0153	0.0859	0.0081	-0.2014	-1.1756
[illegible]	[illegible]	-0.0703	0.0560	0.0139	0.0162	0.0908	0.0138	-0.1885	-1.1632
0.0941	1.0019	-0.0605	0.0046	0.0171	0.0142	0.0817	0.0098	-0.0789	-0.7248
0.1176	1.0115	-0.0412	-0.0317	0.0151	0.0151	0.0739	0.0127	-0.1519	-0.7668
0.1412	1.0263	-0.0195	-0.0450	0.0153	0.0140	0.0728	0.0119	-0.1738	-0.9511
0.1647	1.0272	-0.0009	-0.0285	0.0147	0.0159	0.0727	0.0074	-0.2010	-0.9484
0.1882	1.0282	0.0150	-0.0173	0.0147	0.0144	0.0719	0.0055	-0.1753	-0.9570
0.2118	1.0289	0.0307	-0.0110	0.0150	0.0111	0.0718	0.0232	-0.1873	-0.9709
0.2353	1.0289	0.0436	-0.0111	0.0147	0.0129	0.0717	0.0149	-0.1969	-0.9361
0.2824	1.0278	0.0632	0.0049	0.0151	0.0129	0.0735	0.0102	-0.1627	-1.0051
0.3294	1.0272	0.0789	0.0077	0.0152	0.0141	0.0739	0.0088	-0.1790	-1.0016
0.3765	[illegible]	0.0919	0.0109	0.0151	0.0137	0.0735	0.0059	-0.1717	-0.9831
[illegible]	[illegible]	[illegible]	[illegible]	0.0160	0.0120	0.0780	0.0193	-0.1984	-1.1379
[illegible]	[illegible]	[illegible]	[illegible]	0.0152	0.0135	0.0739	0.0116	-0.1773	-1.0013

AD-A193 818 STUDY OF THREE DIMENSIONAL TRANSONIC FLOW SIMULATIONS (U) AMF INC WHITE PLAINS NY K K OWEN ET AL. APR 88 3/3
ARO-17983.2-CS DAAG29-81-C-0028

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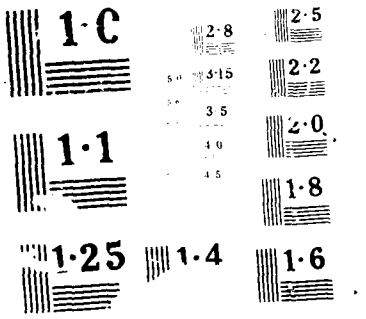
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Run#: 028	M = 1.200	U∞=368.6 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.118 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.1139	0.1689	0.2239	0.0183	0.0230	0.0878	-0.0288	-0.1756	-1.3554
-0.4706	1.1092	0.1624	0.2449	0.0174	0.0211	0.0853	-0.0200	-0.2245	-1.2556
-0.4235	1.1091	0.1544	0.2504	0.0175	0.0210	0.0852	-0.0225	-0.2087	-1.2478
-0.3765	1.1067	0.1442	0.2645	0.0181	0.0214	0.0860	-0.0404	-0.1727	-1.3105
-0.3294	1.1062	0.1316	0.2775	0.0165	0.0214	0.0791	-0.0384	-0.1572	-1.0741
-0.2824	1.1050	0.1154	0.2860	0.0173	0.0203	0.0844	-0.0238	-0.1703	-1.2638
-0.2353	1.0979	0.0932	0.2964	0.0170	0.0212	0.0803	-0.0399	-0.1518	-1.1644
-0.1882	1.0561	0.0541	0.1128	0.0203	0.0222	0.0976	0.0002	-0.2474	-1.0424
-0.1412	1.0419	0.0027	0.1524	0.0300	0.0315	0.1254	-0.0538	-0.0225	0.7717
-0.0941	1.0307	-0.0623	0.1119	0.0266	0.0361	0.1178	-0.1530	-0.0055	0.2096
-0.0471	1.0379	-0.1198	0.0573	0.0251	0.0336	0.1160	-0.1476	0.1144	-1.2525
0.0000	1.0678	-0.1553	0.0231	0.0229	0.0310	0.1078	-0.0830	-0.3097	-1.6351
0.0471	1.0722	-0.1768	-0.0117	0.0216	0.0253	0.0926	-0.0241	-0.2643	-1.3535
0.0941	1.0439	-0.1808	-0.1285	0.0235	0.0271	0.1056	-0.0225	-0.1822	-1.0491
0.1412	1.0349	-0.1518	-0.2385	0.0272	0.0318	0.1211	0.0250	-0.4345	-1.7232
0.1882	1.0509	-0.0932	-0.3163	0.0284	0.0378	0.1243	-0.0476	-0.5432	-1.6737
0.2353	1.0799	-0.0158	-0.3265	0.0276	0.0383	0.1163	-0.1419	-0.1112	-1.0997
0.2824	1.0963	0.0455	-0.3032	0.0185	0.0309	0.0850	-0.0871	-0.2242	-1.0823
0.3294	1.0966	0.0826	-0.2744	0.0172	0.0238	0.0808	-0.0350	-0.1467	-1.0051
0.3765	1.0963	0.1054	-0.2562	0.0172	0.0225	0.0813	-0.0193	-0.1486	-1.0246
0.4235	1.0950	0.1214	-0.2362	0.0186	0.0226	0.0907	-0.0076	-0.2025	-1.3225
0.4706	1.0969	0.1338	-0.2296	0.0180	0.0217	0.0853	-0.0081	-0.1419	-1.1406
0.5176	1.0978	0.1434	-0.2146	0.0174	0.0218	0.0850	-0.0031	-0.1688	-1.1011
0.5647	1.0983	0.1500	-0.1972	0.0176	0.0211	0.0841	-0.0190	-0.1037	-1.0785
0.6118	1.1093	0.1589	-0.1699	0.0160	0.0212	0.0734	-0.0555	-0.1228	-1.0408

Run#: 032	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.0894	0.1638	0.2269	0.0172	0.0191	0.0820	-0.0202	-0.1616	-1.0099
-0.5176	1.0884	0.1600	0.2307	0.0167	0.0188	0.0770	-0.0190	-0.0835	-0.8765
-0.4706	1.0859	0.1501	0.2312	0.0158	0.0180	0.0753	-0.0086	-0.1366	-0.9134
-0.4235	1.0861	0.1420	0.2488	0.0154	0.0194	0.0775	0.0043	-0.2992	-0.9111
-0.3765	1.0834	0.1281	0.2608	0.0157	0.0199	0.0751	-0.0340	-0.1088	-0.9251
-0.3294	1.0779	0.1089	0.2625	0.0158	0.0198	0.0743	-0.0443	-0.1076	-0.9234
-0.2824	1.0597	0.0771	0.2148	0.0208	0.0233	0.0975	-0.0254	-0.0495	0.1825
-0.2353	1.0331	0.0252	0.1338	0.0243	0.0301	0.1137	-0.0744	-0.0596	0.7253
-0.1882	1.0114	-0.0364	0.0703	0.0237	0.0338	0.1078	-0.1246	-0.1034	0.1142
-0.1412	1.0124	-0.1006	0.0590	0.0220	0.0320	0.0994	-0.1431	0.1606	-0.4890
-0.0941	1.0330	-0.1487	0.0463	0.0231	0.0276	0.1047	-0.1272	0.1701	-1.0424
-0.0471	1.0521	-0.1718	-0.0346	0.0182	0.0214	0.0893	-0.0137	-0.1289	-0.6877
0.0000	1.0332	-0.1779	-0.1154	0.0198	0.0215	0.0960	-0.0022	-0.0999	-0.3672
0.0471	1.0174	-0.1666	-0.1805	0.0226	0.0273	0.1035	0.0226	-0.4200	-1.0636
0.0941	1.0144	-0.1225	-0.2649	0.0259	0.0329	0.1180	0.0010	-0.4466	-1.4584
0.1412	1.0287	-0.0533	-0.3260	0.0289	0.0376	0.1337	0.0513	-0.7980	-1.3435
0.1882	1.0589	0.0273	-0.3066	0.0241	0.0335	0.1097	-0.0407	-0.2365	-0.7369
0.2353	1.0740	0.0801	-0.2807	0.0161	0.0228	0.0779	-0 0312	-0.1439	-0.8103
0.2824	1.0770	0.1086	-0.2617	0.0162	0.0201	0.0778	-0.0194	-0.1745	-0.9025
0.3294	1.0784	0.1274	-0.2420	0.0161	0.0201	0.0756	-0.0216	-0.1269	-0.9064
0.3765	1.0788	0.1394	-0.2233	0.0160	0 0191	0.0758	-0.0083	-0.1785	-0.9090
0.4235	1.0799	0.1492	-0.2095	0.0158	0.0183	0.0755	-0.0059	-0.1254	-0.8570
0.4706	1.0815	0.1541	-0.1936	0.0161	0.0195	0.0757	0.0040	-0.2208	-0.8653
0.5176	1.0839	0.1606	-0.1820	0.0165	0.0198	0.0800	-0.0199	-0.1822	-0.8716
0.5647	1.0877	0.1652	-0.1746	0.0167	0.0178	0.0764	-0.0095	-0.1399	-0.8841

Run#: 032	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.0894	0.1638	0.2269	0.0172	0.0191	0.0820	-0.0202	-0.1616	-1.0099
-0.5176	1.0884	0.1600	0.2307	0.0167	0.0188	0.0770	-0.0190	-0.0835	-0.8765
-0.4706	1.0859	0.1501	0.2312	0.0158	0.0180	0.0753	-0.0086	-0.1366	-0.9134
-0.4235	1.0861	0.1420	0.2488	0.0154	0.0194	0.0775	0.0043	-0.2992	-0.9111
-0.3765	1.0834	0.1281	0.2608	0.0157	0.0199	0.0751	-0.0340	-0.1088	-0.9251
-0.3294	1.0779	0.1089	0.2625	0.0158	0.0198	0.0743	-0.0443	-0.1076	-0.9234
-0.2824	1.0597	0.0771	0.2148	0.0208	0.0233	0.0975	-0.0254	-0.0495	0.1825
-0.2353	1.0331	0.0252	0.1338	0.0243	0.0301	0.1137	-0.0744	-0.0596	0.7253
-0.1882	1.0114	-0.0364	0.0703	0.0237	0.0338	0.1078	-0.1246	-0.1034	0.1142
-0.1412	1.0124	-0.1006	0.0590	0.0220	0.0320	0.0994	-0.1431	0.1606	-0.4890
-0.0941	1.0330	-0.1487	0.0463	0.0231	0.0276	0.1047	-0.1272	0.1701	-1.0424
-0.0471	1.0521	-0.1718	-0.0346	0.0182	0.0214	0.0893	-0.0137	-0.1289	-0.6877
0.0000	1.0332	-0.1779	-0.1154	0.0198	0.0215	0.0960	-0.0022	-0.0999	-0.3672
0.0471	1.0174	-0.1666	-0.1805	0.0226	0.0273	0.1035	0.0226	-0.4200	-1.0636
0.0941	1.0144	-0.1225	-0.2649	0.0259	0.0329	0.1180	0.0010	-0.4466	-1.4584
0.1412	1.0287	-0.0533	-0.3260	0.0289	0.0376	0.1337	0.0513	-0.7980	-1.3435
0.1882	1.0589	0.0273	-0.3066	0.0241	0.0335	0.1097	-0.0407	-0.2365	-0.7369
0.2353	1.0740	0.0801	-0.2807	0.0161	0.0228	0.0779	-0.0312	-0.1439	-0.8103
0.2824	1.0770	0.1086	-0.2617	0.0162	0.0201	0.0778	-0.0194	-0.1745	-0.9025
0.3294	1.0784	0.1274	-0.2420	0.0161	0.0201	0.0756	-0.0216	-0.1269	-0.9064
0.3765	1.0788	0.1394	-0.2233	0.0160	0.0191	0.0758	-0.0083	-0.1785	-0.9090
0.4235	1.0799	0.1492	-0.2095	0.0158	0.0183	0.0755	-0.0059	-0.1254	-0.8570
0.4706	1.0815	0.1541	-0.1936	0.0161	0.0195	0.0757	0.0040	-0.2208	-0.8653
0.5176	1.0839	0.1606	-0.1820	0.0165	0.0198	0.0800	-0.0199	-0.1822	-0.8716
0.5647	1.0877	0.1652	-0.1746	0.0167	0.0178	0.0764	-0.0095	-0.1399	-0.8841

Run#: 035	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X 5.000 cal	α = 10 °
RPM : 0000	Y = 0.071 ca.	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0895	0.1630	0.2256	0.0147	0.0181	0.0704	-0.0464	-0.0451	-0.7383
-0.4706	1.0893	0.1600	0.2336	0.0148	0.0176	0.0732	-0.0030	-0.1981	-0.8361
-0.4235	1.0876	0.1500	0.2469	0.0144	0.0161	0.0674	-0.0020	-0.1393	-0.7454
-0.3765	1.0824	0.1395	0.2513	0.0148	0.0174	0.0715	-0.0068	-0.0888	-0.8158
-0.3294	1.0251	0.1112	0.0422	0.0167	0.0201	0.0630	0.0448	-0.0102	-0.2460
-0.2824	1.0107	0.0835	0.0307	0.0290	0.0211	0.1391	0.0306	0.0816	2.6484
-0.2353	0.9765	0.0337	0.0226	0.0217	0.0323	0.0981	-0.0389	-0.5231	0.0134
-0.1882	0.9661	-0.0552	0.0904	0.0217	0.0395	0.0929	-0.2163	-0.2155	-0.6187
-0.1412	0.9921	-0.1280	0.1162	0.0238	0.0387	0.1064	-0.3712	0.8861	-0.9080
-0.0941	1.0296	-0.1780	0.0551	0.0209	0.0251	0.0978	-0.1412	0.2567	-1.2533
-0.0471	1.0393	-0.1931	-0.0432	0.0143	0.0194	0.0669	-0.0386	-0.0285	-0.3213
0.0000	1.0204	-0.1966	-0.0977	0.0175	0.0194	0.0826	-0.0232	-0.0153	-0.0967
0.0471	0.9886	-0.1833	-0.1597	0.0208	0.0266	0.0973	-0.0275	-0.0849	-0.2839
0.0941	0.9644	-0.1281	-0.2223	0.0251	0.0391	0.1142	-0.0509	-0.8397	-1.0702
0.1412	0.9817	-0.0302	-0.3307	0.0339	0.0541	0.1816	0.2404	-3.8620	-1.6963
0.1882	1.0475	0.0740	-0.2968	0.0290	0.0312	0.1486	0.0406	-0.7466	0.3995
0.2353	1.0687	0.1093	-0.2714	0.0160	0.0211	0.0805	-0.0194	-0.2400	-0.6622
0.2824	1.0706	0.1324	-0.2775	0.0151	0.0173	0.0712	-0.0070	-0.1665	-0.7276
0.3294	1.0724	0.1443	-0.2536	0.0147	0.0175	0.0706	-0.0243	-0.1030	-0.6895
0.3765	1.0749	0.1536	-0.2411	0.0148	0.0160	0.0698	-0.0085	-0.0892	-0.7311
0.4235	1.0751	0.1604	-0.2314	0.0145	0.0155	0.0694	0.0008	-0.1636	-0.7645
0.4706	1.0769	0.1659	-0.2188	0.0147	0.0158	0.0708	0.0057	-0.1512	-0.7632
0.5176	1.0794	0.1703	-0.2117	0.0147	0.0163	0.0714	-0.0087	-0.1508	-0.7423
0.5647	1.0803	0.1759	-0.2049	0.0142	0.0138	0.0699	0.0126	-0.1626	-0.7569

Run#: 048	M = 1.200	U∞=370.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RFM : 0000	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1412	0.9411	-0.0129	0.1261	0.0264	0.0268	0.1213	-0.1278	0.0280	-2.4118
-0.0941	0.9764	-0.0336	0.0495	0.0222	0.0217	0.1059	-0.0496	-0.0411	-1.6861
-0.0471	1.0095	-0.0447	0.0015	0.0166	0.0181	0.0765	-0.0270	-0.0597	-0.8447
0.0000	1.0219	-0.0477	0.0472	0.0171	0.0170	0.0779	-0.0125	-0.0908	-0.6453
0.0471	1.0127	-0.0512	0.1086	0.0190	0.0173	0.0848	0.0089	-0.1191	-0.6004
0.0941	0.9859	-0.0573	0.1418	0.0257	0.0189	0.1127	0.0509	-0.1211	-0.2959
0.1412	0.9564	-0.0573	0.2173	0.0260	0.0171	0.1226	0.0518	-0 0619	-1.0325
0.1882	0.9105	-0.0510	0.0858	0.0341	0.0192	0.1670	0.1567	-0.6550	-3.1379
0.2353	0.9862	-0.0058	-0.0785	0.0508	0.0288	0.2439	0.4628	-2.1839	-8.9755
0.2824	1.0503	0.0775	-0.1649	0.0245	0.0440	0.1176	-0.1729	-0.7671	-2.4041
0.3294	1.0654	0.0256	-0.1747	0.0327	0.0915	0.1629	-0.5526	-4.7355	-4.5174

Run#: 043	M = 1.200	U∞=370.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.3765	1.0347	0.1802	0.1784	0.0122	0.0129	0.0568	-0.0149	-0.0796	-0.6235
-0.3294	1.0389	0.1666	0.1803	0.0119	0.0150	0.0553	-0.0234	-0.0493	-0.5269
-0.2824	1.0365	0.1441	0.1746	0.0124	0.0174	0.0590	-0.0243	-0.0793	-0.4527
-0.2588	1.0026	0.1275	0.0570	0.0264	0.0196	0.1328	0.0622	0.2738	2.1031
-0.2353	0.9821	0.1107	0.0135	0.0275	0.0209	0.1319	0.0356	0.0966	1.5727
-0.1882	0.9199	0.0712	-0.0331	0.0250	0.0237	0.1179	0.0509	-0.4225	-0.6235
-0.1647	0.9054	0.0470	-0.0090	0.0207	0.0236	0.1007	-0.0059	-0.4026	-0.7705
-0.1412	0.9081	0.0091	0.0772	0.0230	0.0271	0.1066	-0.1140	-0.0929	-0.6374
-0.0941	0.9720	-0.0244	0.1353	0.0265	0.0241	0.1166	-0.0847	0.0393	-1.3961
-0.0706	1.0071	-0.0464	0.0667	0.0193	0.0200	0.0904	-0.0650	0.0066	-1.4127
-0.0471	1.0210	-0.0548	0.0202	0.0162	0.0188	0.0767	-0.0427	-0.0129	-0.9411
0.0000	1.0250	-0.0662	-0.0075	0.0129	0.0159	0.0617	-0.0087	-0.0918	-0.5255
0.0471	1.0015	-0.0705	0.0112	0.0182	0.0165	0.0819	-0.0051	-0.1392	-0.5378
0.0941	0.9468	-0.0703	0.0324	0.0235	0.0184	0.1027	-0.0024	-0.0684	-0.7959
0.1412	0.9083	-0.0528	0.0086	0.0212	0.0220	0.1007	-0.0071	-0.2221	-1.1770
0.1882	0.9585	-0.0108	-0.1063	0.0359	0.0286	0.1652	0.2080	-1.1353	-3.8120
0.2353	1.0344	0.0595	-0.1772	0.0230	0.0287	0.1076	-0.0147	-0.4554	-1.6075
0.2824	1.0485	0.1163	-0.2086	0.0137	0.0220	0.0653	-0.0374	-0.1989	-0.7120
0.3294	1.0451	0.1444	-0.1928	0.0125	0.0180	0.0585	-0.0267	-0.1066	-0.6142
0.3765	1.0384	0.1618	-0.1729	0.0127	0.0164	0.0604	-0.0195	-0.1346	-0.6529
0.4235	1.0317	0.1757	-0.1500	0.0138	0.0158	0.0665	0.0017	-0.1564	-0.8132
0.4706	1.0279	0.1839	-0.1373	0.0145	0.0155	0.0687	-0.0026	-0.1549	-0.8838
0.5176	1.0230	0.1940	-0.1195	0.0152	0.0158	0.0730	-0.0134	-0.1809	-0.9742

Run#: 052	M = 1.200	U∞ 369.1 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
REM : 0000	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (in.)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.0297	0.1856	0.1038	0.0144	0.0157	0.0683	-0.0154	-0.1179	-0.8819
-0.5176	1.0304	0.1804	0.1055	0.0142	0.0157	0.0671	-0.0056	-0.1573	-0.8509
-0.4706	1.0319	0.1747	0.1122	0.0144	0.0157	0.0684	-0.0111	-0.1277	-0.8786
-0.4235	1.0336	0.1662	0.1170	0.0138	0.0159	0.0654	-0.0116	-0.1336	-0.8022
-0.3765	1.0353	0.1566	0.1193	0.0138	0.0165	0.0666	-0.0157	-0.1462	-0.8223
-0.3294	1.0357	0.1435	0.1203	0.0138	0.0170	0.0658	-0.0274	-0.1096	-0.8069
-0.2824	1.0363	0.1245	0.1211	0.0128	0.0178	0.0597	-0.0480	0.0073	-0.6532
-0.2353	1.0378	0.1042	0.1132	0.0124	0.0172	0.0590	-0.0169	-0.1161	-0.6110
-0.1882	1.0377	0.0836	0.0964	0.0127	0.0184	0.0603	-0.0295	-0.0956	-0.6240
-0.1412	1.0363	0.0633	0.0740	0.0129	0.0183	0.0603	-0.0315	-0.1044	-0.6527
-0.0941	1.0361	0.0428	0.0557	0.0128	0.0187	0.0598	-0.0359	-0.1079	-0.6515
-0.0471	1.0381	0.0268	0.0173	0.0143	0.0190	0.0663	-0.0379	-0.0797	-0.8154
0.0000	1.0395	0.0169	-0.0128	0.0143	0.0201	0.0662	-0.0446	-0.0760	-0.8075
0.0471	1.0430	0.0181	-0.0527	0.0144	0.0204	0.0692	-0.0399	-0.1489	-0.8704
0.0941	1.0439	0.0312	-0.0890	0.0153	0.0210	0.0722	-0.0287	-0.2047	-0.9713
0.1412	1.0431	0.0483	-0.1118	0.0157	0.0227	0.0752	-0.0356	-0.2195	-1.0339
0.1882	1.0421	0.0719	-0.1264	0.0149	0.0235	0.0714	-0.0342	-0.2790	-0.9099
0.2353	1.0437	0.0935	-0.1358	0.0155	0.0252	0.0746	-0.0496	-0.2739	-1.0123
0.2824	1.0403	0.1110	-0.1236	0.0159	0.0233	0.0749	-0.0550	-0.1777	-1.0291
0.4706	1.0312	0.1691	-0.0996	0.0180	0.0249	0.0843	-0.0771	-0.1064	-1.3579
0.6118	1.0265	0.1787	-0.0837	0.0245	0.0284	0.1191	-0.0210	-0.5383	-2.7340

Run#: 060	M = 1.200	U∞= 368.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 0000	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0371	0.2000	0.1248	0.0139	0.0158	0.0665	-0.0111	-0.1291	-0.7645
-0.4706	1.0382	0.1968	0.1326	0.0137	0.0166	0.0664	-0.0067	-0.1322	-0.7420
-0.4235	1.0403	0.1921	0.1435	0.0133	0.0141	0.0659	-0.0061	-0.1083	-0.7176
-0.3765	1.0427	0.1862	0.1507	0.0134	0.0148	0.0636	-0.0105	-0.0841	-0.6906
-0.3294	1.0444	0.1794	0.1584	0.0134	0.0149	0.0655	-0.0028	-0.1381	-0.7497
-0.2824	1.0466	0.1658	0.1637	0.0134	0.0158	0.0647	-0.0140	-0.1141	-0.7586
-0.2353	1.0497	0.1479	0.1603	0.0135	0.0179	0.0651	-0.0383	-0.0692	-0.7957
-0.1882	1.0529	0.1230	0.1673	0.0135	0.0190	0.0655	-0.0388	-0.1069	-0.8049
-0.1412	1.0567	0.0943	0.1759	0.0127	0.0218	0.0587	-0.0513	-0.0912	-0.5869
-0.0941	1.0540	0.0670	0.1723	0.0130	0.0221	0.0603	-0.0615	-0.0505	-0.5899
-0.0471	1.0463	0.0342	0.1659	0.0142	0.0251	0.0666	-0.0594	-0.1731	-0.6649
-0.0235	1.0367	0.0055	0.1301	0.0158	0.0276	0.0722	-0.1003	0.0132	-0.6289
0.0000	1.0348	-0.0046	0.1181	0.0158	0.0247	0.0731	-0.0816	0.0244	-0.6559
0.0118	1.0317	-0.0202	0.0767	0.0165	0.0241	0.0750	-0.1125	0.0670	-0.7675
0.0235	1.0343	-0.0292	0.0528	0.0158	0.0229	0.0734	-0.0790	0.0492	-0.7783
0.0471	1.0382	-0.0348	0.0324	0.0146	0.0202	0.0695	-0.0529	0.0009	-0.6697
0.0706	1.0397	-0.0423	0.0069	0.0139	0.0179	0.0662	-0.0310	-0.0913	-0.6685
0.0941	1.0392	-0.0476	-0.0019	0.0136	0.0165	0.0678	-0.0108	-0.1049	-0.6127
0.1176	1.0358	-0.0469	-0.0168	0.0142	0.0166	0.0687	-0.0092	-0.1188	-0.6321
0.1412	1.0308	-0.0496	-0.0322	0.0144	0.0181	0.0680	-0.0143	-0.1417	-0.6199
0.1647	1.0273	-0.0376	-0.0801	0.0166	0.0222	0.0796	0.0109	-0.3443	-0.9637
0.1882	1.0314	-0.0231	-0.1211	0.0172	0.0259	0.0837	-0.0063	-0.4708	-1.0812
0.2118	1.0409	0.0071	-0.1666	0.0168	0.0339	0.0817	-0.0584	-0.6849	-0.8843
0.2353	1.0486	0.0324	-0.1741	0.0167	0.0306	0.0800	-0.0768	-0.4203	-0.8977
0.2824	1.0564	0.0703	-0.1791	0.0154	0.0268	0.0725	-0.0948	-0.1460	-0.8581
0.3294	1.0570	0.0946	-0.1755	0.0137	0.0249	0.0641	-0.0605	-0.2302	-0.7032
0.3765	1.0532	0.1193	-0.1631	0.0138	0.0280	0.0630	-0.1128	-0.1604	-0.6636
0.4235	1.0475	0.1426	-0.1473	0.0146	0.0252	0.0694	-0.0805	-0.1582	-0.8438
0.4706	1.0441	0.1596	-0.1368	0.0146	0.0238	0.0698	-0.0515	-0.1898	-0.8[illegible]
0.5176	1.0[illegible]	0.1697	-0.1208	0.0150	0.0254	0.0[illegible]	-0.0879	-0.0706	-0.8791
0.5647	1.0444	0.1[illegible]	-0.0938	0.0151	0.0257	0.07[illegible]	-0.0700	-0.1[illegible]30	-0.[illegible]

Run#: 141	M = 1.200	U∞=371.7 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 6000	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0235	0.9812	-0.0081	0.1825	0.0474	0.0369	0.2203	0.1235	-0.7405	1.7255
0.0294	1.0391	-0.0004	0.2539	0.0375	0.0292	0.1772	0.0095	-0.3468	2.2046
0.0353	1.0500	0.0004	0.2536	0.0299	0.0259	0.1408	0.0028	-0.4114	0.5117
0.0412	1.0306	-0.0020	0.1849	0.0235	0.0245	0.1054	0.0121	-0.2875	-0.8384
0.0471	1.0357	-0.0032	0.1290	0.0150	0.0240	0.0784	0.0580	-0.4575	-0.3043
0.0588	1.0721	0.0006	0.2325	0.0148	0.0212	0.0698	0.0083	-0.0055	-0.8174
0.0706	1.0685	0.0024	0.2229	0.0146	0.0203	0.0694	0.0078	-0.0215	-0.8475
0.0824	1.0640	0.0032	0.2102	0.0146	0.0200	0.0690	0.0089	-0.0061	-0.8321
0.0941	1.0630	0.0044	0.2029	0.0148	0.0192	0.0685	0.0123	-0.0166	-0.8521

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
124	1.2	10	SHARP	0	5.50	-60	Y
36	1.2	10	SHARP	0	5.50	0	Z
39	1.2	10	SHARP	0	5.50	0	Z
43	1.2	10	SHARP	0	5.50	0	Z
44	1.2	10	SHARP	0	5.50	0	Z
45	1.2	10	SHARP	0	5.50	0	Z
130	1.2	10	SHARP	0	5.50	60	Y

Run#: [illegible]	M [illegible]	U_∞ [illegible] m/s
NOTE:SHAM	X [illegible] mm	α [illegible] °
RM : [illegible]	Z [illegible] mm	δ [illegible] °

	VELOCITY			RMS			SHEAR STRESS		
Y(mm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0118	0.7289	-0.1280	-0.0134	0.0814	0.0461	0.1694	-1.0409	0.3441	-5.9136
0.0176	0.7998	-0.1303	-0.0198	0.0712	0.0432	0.1235	-1.0176	0.4918	-4.3154
0.0235	0.8885	-0.1263	-0.1044	0.0736	0.0396	0.1401	-0.3405	-0.0641	-5.2982
0.0294	0.9408	-0.1280	-0.1217	0.0568	0.0369	0.1125	-0.4143	0.1251	-3.1885
0.0353	0.9902	-0.1240	-0.1675	0.0546	0.0355	0.1329	-0.1031	-0.0747	-3.3119
0.0412	1.0307	-0.1257	-0.1809	0.0448	0.0322	0.1196	-0.1464	-0.1601	-2.2720
0.0471	1.0662	-0.1267	-0.1843	0.0407	0.0305	0.1215	-0.0414	0.1156	-1.8727
0.0588	1.1173	-0.1288	-0.1631	0.0281	0.0247	0.1040	0.0547	-0.0041	-1.9088
0.0706	1.1251	-0.1303	-0.1615	0.0192	0.0242	0.0891	0.0267	0.0307	-1.4942
0.0824	1.1258	-0.1334	-0.1650	0.0171	0.0237	0.0819	-0.0093	0.0943	-1.2883
0.0941	1.1252	-0.1326	-0.1584	0.0177	0.0222	0.0846	0.0056	0.0153	-1.4011
0.1176	1.1235	-0.1308	-0.1617	0.0179	0.0240	0.0862	0.0185	-0.0335	-1.4085

Run#: [illegible]	M 1.500	U_∞ 464.5 m/s	
NOSE:CHAR:	X [illegible] cal	α 10 °	
REM : [illegible]	Y 6.141 cal	δ 0 °	

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.5647	1.1196	0.1599	0.2172	0.0176	0.0236	0.0857	-0.0450	-0.2521	-1.2817
-0.5176	1.1176	0.1565	0.2280	0.0168	0.0231	0.0805	-0.0548	-0.1363	-1.1350
-0.4706	1.1171	0.1465	0.2388	0.0169	0.0239	0.0813	-0.0555	-0.2034	-1.1664
-0.4235	1.1182	0.1390	0.2447	0.0170	0.0243	0.0787	-0.0667	-0.1562	-1.1158
-0.3765	1.1181	0.1255	0.2546	0.0164	0.0235	0.0791	-0.0460	-0.1970	-1.1175
-0.3294	1.1171	0.1096	0.2708	0.0167	0.0242	0.0812	-0.0533	-0.1875	-1.1433
-0.2824	1.1127	0.0890	0.2664	0.0162	0.0250	0.0764	-0.0469	-0.2198	-1.0271
-0.2353	1.1088	0.0615	0.2618	0.0168	0.0258	0.0779	-0.0790	-0.1492	-1.0461
-0.1882	1.0993	0.0281	0.2386	0.0168	0.0288	0.0780	-0.0904	-0.2272	-1.0551
-0.1412	1.0936	-0.0174	0.2165	0.0169	0.0328	0.0757	-0.1618	-0.0818	-1.0404
-0.0941	1.0882	-0.0642	0.1646	0.0170	0.0329	0.0769	-0.1543	-0.0698	-0.9393
-0.0471	1.0835	-0.1091	0.0959	0.0184	0.0344	0.0829	-0.1652	-0.0021	-1.0569
0.0000	1.0858	-0.1309	0.0264	0.0187	0.0313	0.0859	-0.1334	-0.0853	-1.2880
0.0471	1.0851	-0.1574	-0.0474	0.0162	0.0300	0.0767	-0.1056	-0.3166	-0.9441
0.0941	1.0844	-0.1454	-0.1259	0.0172	0.0336	0.0775	-0.1377	-0.2652	-0.9806
0.1412	1.0901	-0.0912	-0.1915	0.0151	0.0300	0.0740	-0.0118	-0.5218	-0.6822
0.1882	1.0943	-0.0318	-0.2330	0.0180	0.0325	0.0767	-0.0216	-0.2463	-0.9893
0.2353	1.1020	0.0217	-0.2555	0.0189	0.0319	0.0802	0.0304	-0.0749	-0.9216
0.2824	1.1041	0.0600	-0.2505	0.0175	0.0279	0.0776	-0.0140	-0.0686	-0.8113
0.3294	1.1031	0.0889	-0.2501	0.0171	0.0293	0.0804	-0.0948	-0.2014	-0.9967
0.3765	1.1033	0.1066	-0.2285	0.0165	0.0268	0.0774	-0.0753	-0.1752	-0.9661
0.4235	1.1040	0.1227	-0.2115	0.0160	0.0281	0.0773	-0.0853	-0.2433	-0.9650
0.4706	1.1036	0.1347	-0.1946	0.0164	0.0310	0.0753	-0.1204	-0.1987	-0.9746
0.5176	1.1049	0.1434	-0.1855	0.0168	0.0349	0.0794	-0.1400	-0.3398	-1.0578
0.5647	1.1063	0.1561	-0.1761	0.0174	0.0341	0.0808	-0.1729	-0.1848	-1.1[illegible]
0.6118	1.1095	0.1698	-0.1671	0.0171	0.0339	0.0778	-0.1666	-0.1143	-1.2[illegible]

Run#: [illegible]	M [illegible]	Uoo 370.6 m/s
[illegible]	X [illegible]	α [illegible] 10 °
RPM : [illegible]	Y 0.[illegible]	δ [illegible] 0 °

	VELOCITY			RMS			SHEAR STRESS		
X/(Y+L)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.5647	1.1169	0.1501	0.2161	0.0166	0.0239	0.0784	-0.0608	-0.1141	-1.0774
-0.5176	1.1150	0.1435	0.2220	0.0167	0.0241	0.0798	-0.0533	-0.1417	-1.0513
-0.4706	1.1159	0.1348	0.2267	0.0165	0.0249	0.0801	-0.0496	-0.2271	-1.0241
-0.4235	1.1157	0.1268	0.2304	0.0161	0.0237	0.0766	-0.0504	-0.1473	-0.9583
-0.3765	1.1169	0.1098	0.2412	0.0166	0.0253	0.0770	-0.0579	-0.1202	-0.9854
-0.3294	1.1193	0.0966	0.2462	0.0163	0.0241	0.0762	-0.0745	-0.0870	-0.9716
-0.2824	1.1193	0.0770	0.2412	0.0162	0.0242	0.0774	-0.0568	-0.1498	-0.9983
-0.2353	1.1125	0.0519	0.2169	0.0161	0.0262	0.0776	-0.0787	-0.1215	-0.8725
-0.1882	1.1017	0.0234	0.1836	0.0163	0.0265	0.0754	-0.0935	-0.1432	-0.8946
-0.1412	1.0962	-0.0073	0.1633	0.0162	0.0299	0.0750	-0.1052	-0.2292	-0.9446
-0.0941	1.0898	-0.0376	0.1172	0.0164	0.0289	0.0773	-0.1078	-0.2045	-1.0686
-0.0471	1.0933	-0.0652	0.0846	0.0174	0.0292	0.0799	-0.1218	-0.1497	-1.0773
0.0000	1.1002	-0.0818	0.0686	0.0173	0.0299	0.0784	-0.1227	-0.1808	-1.2234
0.0471	1.0920	-0.0891	-0.0234	0.0168	0.0237	0.0786	-0.0665	-0.1353	-1.0933
0.0941	1.0944	-0.0782	-0.0889	0.0164	0.0268	0.0773	-0.0934	-0.1880	-1.0550
0.1412	1.0954	-0.0524	-0.1342	0.0150	0.0292	0.0717	-0.0825	-0.3634	-0.8348
0.1882	1.0981	-0.0225	-0.1714	0.0169	0.0299	0.0793	-0.1015	-0.2165	-1.0404
0.2353	1.1061	0.0123	-0.2036	0.0171	0.0278	0.0812	-0.0708	-0.3158	-0.9421
0.2824	1.1136	0.0417	-0.2189	0.0168	0.0279	0.0793	-0.0944	-0.2781	-0.9047
0.3294	1.1142	0.0649	-0.2084	0.0171	0.0258	0.0792	-0.0827	-0.1620	-1.0334
0.3765	1.1118	0.0842	-0.1885	0.0168	0.0255	0.0788	-0.0753	-0.1671	-1.0610
0.4235	1.1098	0.1058	-0.1799	0.0167	0.0260	0.0794	-0.0706	-0.1653	-1.0582
0.4706	1.1083	0.1208	-0.1720	0.0171	0.0273	0.0798	-0.0983	-0.1264	-1.0439
0.5176	1.1081	0.1305	-0.1618	0.0167	0.0267	0.0799	-0.0522	-0.3353	-1.0049
0.5647	1.1073	0.1406	-0.1515	0.0171	0.0282	0.0816	-0.0866	-0.1972	-1.0578

Run#: 043	M = 1.200	U∞= 366.9 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RFM : 0000	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.4235	1.0786	0.1425	0.1019	0.0371	0.0214	0.1930	0.1439	1.1842	4.6315
-0.3765	1.1038	0.1380	0.2503	0.0217	0.0214	0.1050	0.0134	0.0320	-0.1475
-0.3294	1.0862	0.1222	0.2192	0.0358	0.0227	0.1733	0.1006	0.4707	3.7267
-0.2824	1.0171	0.0880	0.0100	0.0323	0.0238	0.1524	0.0542	0.1550	1.4899
-0.2353	0.9832	0.0467	0.0735	0.0331	0.0377	0.1549	0.0311	-0.5268	-0.1090
-0.1882	0.9713	-0.0258	0.0854	0.0298	0.0514	0.1345	-0.3927	0.1407	-0.6040
-0.1412	0.9928	-0.1124	0.0210	0.0286	0.0438	0.1257	-0.3675	0.1182	-1.2876
-0.0941	1.0368	-0.1651	-0.0368	0.0283	0.0342	0.1305	-0.1928	0.1507	-1.3317
-0.0471	1.0725	-0.1889	-0.0088	0.0215	0.0269	0.1022	-0.0662	-0.2086	-0.8140
0.0000	1.0560	-0.1947	-0.0098	0.0219	0.0239	0.1015	-0.0021	-0.0904	-0.3425
0.0471	1.0193	-0.1992	-0.0364	0.0257	0.0264	0.1068	-0.0270	-0.0333	-0.3505
0.0941	0.9854	-0.1706	-0.1461	0.0297	0.0368	0.1367	-0.1501	-0.4169	-1.4104
0.1412	0.9795	-0.1145	-0.2757	0.0336	0.0437	0.1604	-0.0487	-1.2721	-2.2380
0.1882	1.0134	-0.0155	-0.4310	0.0377	0.0529	0.1836	0.0805	-1.7050	-2.3299
0.2353	1.0671	0.0770	-0.4116	0.0305	0.0360	0.1469	0.0350	0.1803	1.4283
0.2824	1.0944	0.1150	-0.2844	0.0172	0.0228	0.0830	-0.0208	-0.1803	-0.9170
0.3294	1.0963	0.1319	-0.2525	0.0164	0.0217	0.0785	-0.0282	-0.1452	-0.9515
0.3765	1.0979	0.1432	-0.2382	0.0164	0.0215	0.0786	-0.0391	-0.1305	-0.9620
0.4235	1.0990	0.1523	-0.2247	0.0170	0.0212	0.0802	-0.0252	-0.1936	-1.0233
0.4706	1.0993	0.1586	-0.2068	0.0170	0.0222	0.0794	-0.0421	-0.1691	-0.9955
0.5176	1.1012	0.1661	-0.1972	0.0164	0.0211	0.0802	-0.0364	-0.1812	-0.9932
0.5647	1.1039	0.1689	-0.1919	0.0174	0.0215	0.0816	-0.0189	-0.2768	-1.0582

Run#: 044	M = 1.200	U∞=368.6 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2353	0.9964	0.0779	0.2598	0.0466	0.0399	0.2132	0.3100	-0.1597	2.6684
-0.1882	0.9323	-0.0268	0.0978	0.0321	0.0689	0.1355	-0.8104	0.2403	-1.5716
-0.1412	0.9676	-0.1354	0.0019	0.0315	0.0466	0.1430	-0.4496	0.3176	-2.5939
-0.0941	1.0542	-0.1781	0.0451	0.0293	0.0305	0.1296	-0.1042	-0.0546	-1.6718
-0.0471	1.0810	-0.1920	0.0328	0.0207	0.0235	0.1036	-0.0188	-0.3145	-1.6402
0.0000	1.0692	-0.1965	0.0379	0.0205	0.0254	0.0974	-0.0417	-0.2644	-1.5356
0.0471	1.0354	-0.1971	0.0879	0.0256	0.0286	0.1200	-0.0876	-0.2693	-2.2157
0.0941	0.9846	-0.1823	0.0723	0.0274	0.0386	0.1217	-0.2432	0.0007	-1.7099
0.1412	0.9473	-0.1442	-0.0496	0.0319	0.0441	0.1535	-0.0344	-1.3651	-3.2145
0.1882	0.9570	-0.0504	-0.3577	0.0529	0.0693	0.2594	0.2058	-4.8366	-11.3149
0.2353	1.0254	0.0845	-0.4069	0.0480	0.0448	0.2391	0.2884	-0.6326	-0.8562
0.2824	1.0852	0.1364	-0.2592	0.0202	0.0221	0.0990	0.0123	-0.2928	-1.3323
0.3294	1.0918	0.1494	-0.2655	0.0184	0.0185	0.0883	-0.0044	-0.1769	-1.2162
0.3765	1.0928	0.1552	-0.2504	0.0180	0.0161	0.0853	0.0043	-0.1478	-1.1565

Run#: 045	M = 1.200	U∞=368.6 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 0000	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1412	1.0187	-0.1464	0.1125	0.0315	0.0349	0.1420	-0.0202	-0.5394	-2.6217
-0.1176	1.0439	-0.1626	0.0731	0.0296	0.0299	0.1374	-0.0887	-0.0649	-2.5099
-0.0941	1.0613	-0.1765	0.0224	0.0254	0.0253	0.1179	-0.0405	-0.2719	-1.4286
-0.0471	1.0791	-0.1866	-0.0242	0.0216	0.0210	0.0973	-0.0137	-0.1421	-0.6132
0.0000	1.0753	-0.1845	0.0339	0.0207	0.0210	0.0991	-0.0122	-0.2656	-1.2572
0.0471	1.0550	-0.1875	0.0972	0.0247	0.0219	0.1131	-0.0062	-0.2399	-1.9015
0.0941	1.0112	-0.1858	0.1346	0.0262	0.0260	0.1130	-0.0655	-0.0093	-1.3765
0.1412	0.9665	-0.1731	0.1032	0.0284	0.0320	0.1274	-0.0990	-0.2631	-1.4516
0.1882	0.9349	-0.1302	-0.0720	0.0422	0.0484	0.2103	0.1087	-2.7119	-5.9468
0.2353	0.9605	-0.0502	-0.4198	0.0515	0.0593	0.2533	0.1599	-2.8582	-8.1072

Run#: 130	M = 1.200	U∞=371.0 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 0000	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0118	0.7374	-0.1337	-0.0774	0.0791	0.0495	0.1874	0.1108	-0.1638	6.5295
0.0176	0.8636	-0.1276	-0.0050	0.0669	0.0479	0.2365	0.0389	-0.3042	4.3271
0.0235	0.9310	-0.1202	0.0935	0.0554	0.0373	0.1742	-0.1016	-0.5576	1.5969
0.0294	0.9860	-0.1108	0.1324	0.0497	0.0339	0.1665	-0.0785	-0.3935	0.3833
0.0353	1.0287	-0.1113	0.1737	0.0404	0.0312	0.1403	-0.0738	-0.0540	-0.2463
0.0412	1.0608	-0.1130	0.1881	0.0366	0.0284	0.1376	-0.0389	-0.2226	0.3438
0.0471	1.0865	-0.1124	0.1991	0.0296	0.0246	0.1253	-0.0598	-0.0942	-0.7070
0.0529	1.0626	-0.1103	0.0405	0.0213	0.0232	0.1104	-0.0179	0.1276	-0.7842
0.0588	1.1181	-0.1073	0.2159	0.0170	0.0207	0.0807	-0.0072	-0.0266	-1.0005
0.0706	1.1238	-0.1063	0.2091	0.0157	0.0209	0.0754	0.0164	-0.1148	-0.9815
0.0941	1.1263	-0.1028	0.1815	0.0146	0.0219	0.0692	0.0003	-0.0271	-0.8608

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
126	1.2	10	SHARP	9830	5.00	-60	Y
25	1.2	10	SHARP	9830	5.00	0	Y
31	1.2	10	SHARP	9830	5.00	0	Z
33	1.2	10	SHARP	9830	5.00	0	Z
34	1.2	10	SHARP	9830	5.00	0	Z
53	1.2	10	SHARP	9830	5.00	0	Z
56	1.2	10	SHARP	9830	5.00	0	Z
57	1.2	10	SHARP	9830	5.00	0	Z
58	1.2	10	SHARP	9830	5.00	0	Z
59	1.2	10	SHARP	9830	5.00	0	Z
132	1.2	10	SHARP	9830	5.00	60	Y

Run#: 126	M = 1.200	U∞=372.5 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0059	0.8131	-0.0128	-0.9511	0.0616	0.0192	0.3314	-0.0623	0.7048	-15.7856
0.0118	0.8353	-0.0562	-0.6378	0.0635	0.0305	0.3408	-0.1312	1.6178	-15.5686
0.0235	0.8498	-0.0560	-0.2489	0.0704	0.0319	0.3403	-0.1096	1.0985	-18.4117
0.0294	0.8692	-0.0570	-0.1092	0.0532	0.0381	0.2362	-0.0417	0.1222	-5.3805
0.0353	0.9118	-0.0547	-0.0782	0.0520	0.0393	0.2364	-0.0351	0.6326	-5.4124
0.0412	0.9556	-0.0524	-0.0718	0.0447	0.0309	0.2088	0.0534	0.0826	-4.0875
0.0471	0.9900	-0.0438	-0.0279	0.0384	0.0313	0.1735	0.0812	-0.1424	-4.1441
0.0529	1.0250	-0.0371	-0.0764	0.0233	0.0249	0.1085	-0.0016	0.1387	-1.7694
0.0588	1.0382	-0.0338	-0.0923	0.0203	0.0249	0.0956	0.0287	-0.0643	-1.5773
0.0647	1.0454	-0.0340	-0.1141	0.0185	0.0230	0.0894	-0.0009	0.0527	-1.3704
0.0706	1.0526	-0.0309	-0.1355	0.0165	0.0221	0.0807	-0.0083	0.0674	-1.1243
0.0824	1.0539	-0.0287	-0.1452	0.0165	0.0215	0.0788	-0.0047	0.0566	-1.1094
0.0941	1.0503	-0.0296	-0.1327	0.0165	0.0206	0.0806	-0.0016	0.0507	-1.1315
0.1059	1.0497	-0.0285	-0.1360	0.0166	0.0206	0.0802	-0.0007	0.0219	-1.0974
0.1176	1.0478	-0.0287	-0.1289	0.0162	0.0212	0.0772	-0.0097	0.0634	-1.0492
0.1412	1.0454	-0.0273	-0.1272	0.0172	0.0203	0.0812	0.0136	-0.0007	-1.1799
0.1647	1.0436	-0.0220	-0.1155	0.0165	0.0211	0.0785	-0.0084	0.0800	-1.0983
0.2353	1.0393	-0.0187	-0.1027	0.0164	0.0201	0.0811	-0.0086	0.0759	-1.1109

Run#: 025	M = 1.200	U∞=370.2 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y (in.)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0176	0.8703	-0.0498	0.0288	0.0323	0.0260	0.1525	-0.0866	-0.7573	-3.3782
0.0235	0.9277	-0.0564	0.0457	0.0379	0.0298	0.1627	-0.0423	-0.1393	-2.8906
0.0471	1.0147	-0.0681	0.0393	0.0170	0.0190	0.0785	-0.0172	-0.1576	-0.9525
0.0706	1.0196	-0.0672	0.0201	0.0164	0.0162	0.0794	-0.0004	-0.1946	-1.0356
0.0941	1.0237	-0.0555	-0.0046	0.0164	0.0142	0.0787	0.0119	-0.1817	-1.0875
0.1176	1.0274	-0.0371	-0.0080	0.0165	0.0153	0.0792	-0.0007	-0.1259	-1.1701
0.2353	1.0276	0.0442	0.0088	0.0161	0.0144	0.0779	0.0152	-0.2246	-1.1488
0.2824	1.0259	0.0644	0.0191	0.0152	0.0134	0.0749	0.0150	-0.2204	-1.0242
0.3294	1.0246	0.0796	0.0185	0.0156	0.0141	0.0742	0.0116	-0.1779	-1.0477
0.3765	1.0235	0.0923	0.0211	0.0153	0.0143	0.0732	0.0059	-0.1783	-1.0005
0.4235	1.0236	0.1051	0.0151	0.0156	0.0136	0.0753	0.0185	-0.2202	-1.0518
0.4706	1.0209	0.1145	0.0174	0.0156	0.0140	0.0730	0.0114	-0.1846	-1.0152

Run#: 031	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.118 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.1118	0.1611	0.2129	0.0234	0.0250	0.1156	0.0136	-0.5686	-2.3547
-0.5176	1.1071	0.1549	0.2121	0.0235	0.0252	0.1157	-0.0276	-0.3747	-2.3527
-0.4706	1.1032	0.1471	0.2218	0.0227	0.0237	0.1107	-0.0039	-0.3769	-2.2173
-0.4235	1.0995	0.1393	0.2235	0.0225	0.0236	0.1086	-0.0201	-0.3800	-2.1531
-0.3765	1.0962	0.1302	0.2269	0.0217	0.0226	0.1072	-0.0019	-0.3959	-2.0284
-0.3294	1.0950	0.1166	0.2412	0.0210	0.0223	0.1036	0.0084	-0.3889	-1.8882
-0.2824	1.0960	0.1024	0.2430	0.0202	0.0204	0.1005	0.0073	-0.3258	-1.7572
-0.2353	1.0928	0.0845	0.2382	0.0182	0.0191	0.0901	0.0026	-0.2560	-1.3809
-0.1882	1.0851	0.0640	0.2228	0.0183	0.0191	0.0864	0.0014	-0.2770	-1.2210
-0.1412	1.0698	0.0344	0.1899	0.0196	0.0208	0.0970	-0.0003	-0.2626	-0.9159
-0.0941	1.0354	-0.0037	0.1333	0.0274	0.0231	0.1282	0.0214	-0.2386	-0.7548
-0.0471	1.0085	-0.0462	0.1008	0.0301	0.0256	0.1501	0.0525	-0.5478	-2.0140
0.0000	1.0339	-0.0898	0.1560	0.0315	0.0298	0.1512	-0.1222	-0.1114	-3.8997
0.0471	1.0630	-0.1419	0.0123	0.0237	0.0299	0.1147	-0.0892	-0.1904	-2.2961
0.0941	1.0668	-0.1653	-0.0741	0.0192	0.0233	0.0908	-0.0099	-0.3035	-1.3280
0.1412	1.0637	-0.1713	-0.1501	0.0224	0.0225	0.1071	0.0011	-0.2639	-1.9058
0.1882	1.0638	-0.1572	-0.2211	0.0254	0.0260	0.1203	0.0608	-0.6058	-2.4262
0.2353	1.0773	-0.1039	-0.2850	0.0261	0.0396	0.1269	0.0128	-0.9724	-2.1966
0.2824	1.0890	-0.0190	-0.3077	0.0216	0.0376	0.1027	-0.1298	-0.3655	-1.2817
0.3294	1.0936	0.0503	-0.3220	0.0186	0.0295	0.0883	-0.0508	-0.4097	-1.0636
0.3765	1.0937	0.0891	-0.2954	0.0185	0.0235	0.0908	-0.0275	-0.2912	-1.2220
0.4235	1.0942	0.1218	-0.2727	0.0178	0.0215	0.0858	-0.0142	-0.2905	-1.1385
0.4706	1.0919	0.1457	-0.2488	0.0180	0.0195	0.0881	-0.0019	-0.2183	-1.2347
0.5176	1.0917	0.1575	-0.2257	0.0180	0.0184	0.0861	-0.0169	-0.1773	-1.1777
0.5647	1.0939	0.1639	-0.2168	0.0178	0.0188	0.0871	0.0021	-0.2743	-1.2549
0.6118	1.0945	0.1700	-0.2028	0.0179	0.0182	0.0868	0.0122	-0.2795	-1.2725

Run#: 033	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.094 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.0879	0.1524	0.2129	0.0162	0.0202	0.0782	-0.0283	-0.1642	-1.0366
-0.5176	1.0861	0.1443	0.2167	0.0164	0.0201	0.0789	-0.0332	-0.1188	-1.0468
-0.4706	1.0860	0.1326	0.2175	0.0168	0.0217	0.0799	-0.0376	-0.1512	-1.0674
-0.4235	1.0847	0.1218	0.2201	0.0170	0.0239	0.0803	-0.0535	-0.1724	-1.0753
-0.3765	1.0820	0.1073	0.2249	0.0181	0.0241	0.0855	-0.0331	-0.2118	-1.2481
-0.3294	1.0775	0.0916	0.2160	0.0183	0.0237	0.0870	-0.0616	-0.1241	-1.2680
-0.2824	1.0685	0.0714	0.1912	0.0189	0.0266	0.0895	-0.0689	-0.1255	-1.0766
-0.2353	1.0438	0.0428	0.1166	0.0241	0.0299	0.1234	-0.0365	-0.2840	-0.1074
-0.1882	1.0165	0.0056	0.0509	0.0276	0.0345	0.1277	-0.0602	-0.5630	-0.1579
-0.1412	0.9900	-0.0399	0.0367	0.0274	0.0375	0.1313	-0.0973	-0.4207	-0.8081
-0.0941	1.0012	-0.0918	0.0865	0.0315	0.0375	0.1513	-0.1408	0.0828	-1.1575
-0.0471	1.0360	-0.1396	0.0320	0.0330	0.0364	0.1525	-0.1873	-0.0502	-3.3519
0.0000	1.0528	-0.1592	-0.0618	0.0251	0.0295	0.1201	-0.0415	-0.3947	-2.2503
0.0471	1.0519	-0.1624	-0.1472	0.0223	0.0313	0.1013	-0.0829	-0.2214	-1.4231
0.0941	1.0471	-0.1483	-0.2288	0.0263	0.0378	0.1243	-0.0778	-0.6404	-2.2303
0.1412	1.0509	-0.0910	-0.3070	0.0287	0.0615	0.1314	-0.3958	-1.1431	-2.0687
0.1882	1.0632	-0.0192	-0.3362	0.0291	0.0577	0.1340	-0.4000	-0.9438	-1.9155
0.2353	1.0724	0.0518	-0.3433	0.0238	0.0467	0.1112	-0.2302	-0.5113	-1.3151
0.2824	1.0745	0.1013	-0.3283	0.0228	0.0370	0.1048	-0.1152	-0.3232	-1.2596
0.3294	1.0764	0.1389	-0.3040	0.0222	0.0331	0.1057	-0.0876	-0.4089	-1.3678
0.3765	1.0780	0.1564	-0.2761	0.0213	0.0310	0.1043	-0.0869	-0.1713	-1.4764
0.4235	1.0788	0.1679	-0.2545	0.0206	0.0327	0.0972	-0.0983	-0.3378	-1.2973
0.4706	1.0805	0.1731	-0.2353	0.0211	0.0318	0.1006	-0.1171	-0.2509	-1.4801
0.5176	1.0828	0.1763	-0.2171	0.0216	0.0323	0.1027	-0.0892	-0.3394	-1.6257
0.5647	1.0831	0.1806	-0.2094	0.0213	0.0303	0.1035	-0.0749	-0.2162	-1.5855
0.6118	1.0841	0.1796	-0.1961	0.0219	0.0342	0.1058	-0.0959	-0.3952	-1.7206
0.6588	1.0859	0.1806	-0.1896	0.0210	0.0341	0.1034	-0.1152	-0.3235	-1.6717
0.7059	1.0877	0.1807	-0.1907	0.0223	0.0355	0.1054	-0.1217	-0.4084	-1.8107

Run#: 034	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0837	0.1466	0.1968	0.0161	0.0177	0.0774	-0.0011	-0.1487	-0.9145
-0.4706	1.0828	0.1378	0.2122	0.0173	0.0180	0.0840	-0.0167	-0.1400	-1.1824
-0.4235	1.0828	0.1260	0.2154	0.0209	0.0180	0.1019	0.0254	-0.3463	-1.8423
-0.3765	1.0803	0.1129	0.2233	0.0219	0.0298	0.1047	-0.0742	-0.3110	-1.9312
-0.3294	1.0395	0.0937	0.0571	0.0227	0.0295	0.1098	-0.0443	-0.1486	-0.7423
-0.2824	1.0549	0.0797	0.1592	0.0238	0.0285	0.1186	-0.0363	-0.1916	-0.6977
-0.2353	1.0012	0.0498	-0.0118	0.0316	0.0314	0.1546	-0.0055	-0.0564	0.8711
-0.1882	0.9644	0.0076	-0.0231	0.0319	0.0415	0.1596	-0.0962	-0.9703	-2.2546
-0.1412	0.9493	-0.0510	0.0414	0.0315	0.0568	0.1507	-0.3650	-0.7944	-1.9661
-0.0941	0.9907	-0.1121	0.1063	0.0424	0.0456	0.1956	-0.2580	0.4808	-2.3446
-0.0471	1.0391	-0.1591	0.0321	0.0335	0.0379	0.1641	-0.1936	-0.0334	-4.0626
0.0000	1.0501	-0.1810	-0.0707	0.0226	0.0307	0.1069	-0.0955	-0.1678	-1.4391
0.0000	1.0483	-0.1812	-0.0656	0.0165	0.0195	0.0778	-0.0291	-0.1293	-0.7422
0.0471	1.0376	-0.1897	-0.1293	0.0183	0.0196	0.0848	-0.0112	-0.1194	-0.6096
0.0941	1.0188	-0.1821	-0.2017	0.0230	0.0252	0.1103	0.0144	-0.2810	-0.8448
0.1412	1.0045	-0.1338	-0.2882	0.0288	0.0387	0.1346	0.0842	-1.0612	-1.5862
0.1882	1.0235	-0.0119	-0.3630	0.0354	0.0527	0.1772	0.1511	-2.8515	-0.8655
0.2353	1.0674	0.0896	-0.3235	0.0212	0.0278	0.0999	0.0458	-0.2692	-0.7442
0.2824	1.0727	0.1291	-0.3224	0.0163	0.0218	0.0794	0.0044	-0.1688	-0.7171
0.3294	1.0732	0.1566	-0.3003	0.0156	0.0169	0.0737	-0.0033	-0.1320	-0.6956
0.3765	1.0751	0.1715	-0.2773	0.0151	0.0141	0.0727	0.0064	-0.1317	-0.7492
0.4235	1.0768	0.1797	-0.2477	0.0152	0.0137	0.0751	0.0118	-0.1227	-0.7382
0.4706	1.0781	0.1841	-0.2337	0.0145	0.0128	0.0715	0.0084	-0.1384	-0.7537
0.5176	1.0788	0.1872	-0.2153	0.0151	0.0136	0.0732	0.0061	-0.1305	-0.8045
0.5647	1.0811	0.1878	-0.1987	0.0151	0.0135	0.0732	0.0102	-0.1866	-0.8392

Run#: 053	M = 1.200	U∞= 369.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y/δ	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1412	0.9549	-0.0272	-0.0076	0.0391	0.0340	0.1570	-0.2787	0.3296	-3.7839
-0.0941	0.9609	-0.0317	-0.0194	0.0371	0.0311	0.1599	-0.1109	-0.0003	-3.7127
-0.0471	1.0039	-0.0503	-0.0397	0.0254	0.0269	0.1027	-0.1035	-0.0612	-1.1469
0.0000	1.0252	-0.0639	-0.0048	0.0178	0.0244	0.0750	-0.0699	-0.0475	-0.7703
0.0471	1.0181	-0.0679	0.0354	0.0180	0.0236	0.0811	-0.0347	-0.1816	-0.8208
0.0941	0.9870	-0.0758	0.0765	0.0219	0.0248	0.0933	-0.0756	-0.1982	-0.9121
0.1412	0.9517	-0.0743	0.0680	0.0229	0.0244	0.1049	-0.0227	-0.2145	-0.9317
0.1882	0.9425	-0.0612	0.0071	0.0280	0.0298	0.1355	-0.0843	-1.0289	-1.4224
0.2353	0.9689	-0.0266	-0.0469	0.0363	0.0596	0.1804	0.8083	-5.5346	-4.1369
0.2824	0.9901	0.0217	-0.0709	0.0472	0.1021	0.1730	3.7395	-12.6482	-6.4709
0.3294	0.9921	0.0301	-0.0720	0.0488	0.1109	0.1697	4.4549	-13.9117	-6.6627

Run #: [illegible]	M [illegible]	[illegible]
[illegible]	X [illegible]	α [illegible]
RPM : [illegible]	Y [illegible]	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.4706	1.0369	0.1963	0.1495	0.0137	0.0164	0.0654	-0.0124	-0.0865	-0.4568
-0.4235	1.0377	0.1916	0.1509	0.0142	0.0164	0.0650	-0.0180	-0.0983	-0.6528
-0.3294	1.0430	0.1761	0.1675	0.0140	0.0160	0.0662	-0.0055	-0.1299	-0.7392
-0.2353	1.0518	0.1454	0.1787	0.0150	0.0188	0.0633	-0.0357	-0.1132	-0.7227
-0.1882	1.0531	0.1212	0.1639	0.0146	0.0183	0.0725	-0.0327	-0.1005	-0.9512
-0.1412	1.0524	0.0966	0.2006	0.0131	0.0195	0.0661	-0.0229	-0.1645	-0.6458
-0.0941	1.0371	0.0686	0.2920	0.0171	0.0216	0.0841	-0.0076	-0.1394	-0.6398
-0.0471	1.0113	0.0368	0.3872	0.0181	0.0227	0.0870	-0.0264	-0.1002	-0.7989
0.0000	1.0028	-0.0223	0.1186	0.0315	0.0253	0.1539	-0.1568	0.5963	-2.9984
0.0471	1.0498	-0.0532	0.0118	0.0194	0.0220	0.0898	-0.0582	-0.0648	-1.2120
0.0941	1.0534	-0.0607	0.0242	0.0164	0.0195	0.0742	-0.0277	-0.1223	-0.8077
0.1412	1.0389	-0.0685	0.0762	0.0167	0.0214	0.0789	-0.0297	-0.1596	-0.8789
0.1882	1.0166	-0.0712	0.1022	0.0185	0.0219	0.0850	-0.0417	-0.1685	-0.7601
0.2353	0.9970	-0.0551	0.0396	0.0223	0.0252	0.1085	0.0071	-0.4721	-1.3189
0.2824	1.0051	-0.0051	-0.1518	0.0249	0.0352	0.1207	0.0366	-1.0421	-1.9272
0.3294	1.0370	0.0837	-0.2252	0.0206	0.0290	0.0968	-0.0180	-0.2141	-0.9386
0.3765	1.0540	0.1327	-0.2219	0.0153	0.0228	0.0727	-0.0351	-0.1808	-0.6859
0.4235	1.0528	0.1617	-0.2002	0.0149	0.0191	0.0703	-0.0241	-0.1020	-0.7285
0.4706	1.0488	0.1836	-0.1684	0.0146	0.0171	0.0685	-0.0162	-0.1415	-0.7967

[illegible]	M	[illegible]	[illegible]
[illegible]	X	[illegible]	α	[illegible]
[illegible]	Y	[illegible]	δ	[illegible]

	VELOCITY			RMS			SHEAR STRESS		
[illegible]	$\overline{U}$ / Uoo	$\overline{V}$ / Uoo	$\overline{W}$ / Uoo	$\overline{U'}$ / Uoo	$\overline{V'}$ / Uoo	$\overline{W'}$ / Uoo	$1000*\overline{U'V'}$ / Uoo^2	$1000*\overline{V'W'}$ / Uoo^2	$1000*\overline{W'U'}$ / Uoo^2
-0.5176	1.0364	0.1945	0.1245	0.0141	0.0167	0.0676	-0.0012	-0.1705	-0.7972
-0.4706	1.0379	0.1897	0.1347	0.0138	0.0154	0.0652	-0.0129	-0.0928	-0.7501
-0.4235	1.0393	0.1852	0.1434	0.0134	0.0151	0.0643	-0.0050	-0.1344	-0.7583
-0.3765	1.0408	0.1795	0.1449	0.0139	0.0158	0.0660	-0.0090	-0.1517	-0.7678
-0.3294	1.0413	0.1703	0.1538	0.0125	0.0165	0.0595	-0.0280	-0.0638	-0.5874
-0.2824	1.0436	0.1592	0.1635	0.0129	0.0177	0.0601	-0.0318	-0.0779	-0.6290
-0.2353	1.0479	0.1436	0.1611	0.0129	0.0180	0.0598	-0.0397	-0.0495	-0.6266
-0.1882	1.0535	0.1243	0.1636	0.0138	0.0190	0.0638	-0.0407	-0.0819	-0.7433
-0.1412	1.0588	0.1005	0.1603	0.0141	0.0195	0.0660	-0.0366	-0.0990	-0.8053
-0.0941	1.0602	0.0750	0.1677	0.0145	0.0218	0.0680	-0.0503	-0.1127	-0.7987
-0.0471	1.0513	0.0503	0.2045	0.0155	0.0236	0.0735	-0.0513	-0.1551	-0.9497
0.0000	1.0309	0.0208	0.2321	0.0188	0.0242	0.0894	-0.0434	-0.2254	-1.1379
0.0471	1.0334	-0.0134	0.0917	0.0192	0.0239	0.0925	-0.0708	-0.0483	-1.2964
0.0941	1.0527	-0.0392	0.0076	0.0154	0.0207	0.0718	-0.0254	-0.1400	-0.8559
0.1412	1.0525	-0.0433	-0.0283	0.0152	0.0189	0.0735	-0.0126	-0.1824	-0.8806
0.1882	1.0518	-0.0356	-0.0859	0.0162	0.0212	0.0768	-0.0300	-0.2036	-1.0033
0.2353	1.0532	-0.0060	-0.1460	0.0160	0.0249	0.0759	-0.0549	-0.2217	-0.9825
0.2824	1.0556	0.0378	-0.1873	0.0156	0.0288	0.0722	-0.0959	-0.1989	-0.9119
0.3294	1.0547	0.0776	-0.1956	0.0156	0.0236	0.0739	-0.0571	-0.1188	-0.9441
0.3765	1.0522	0.1151	-0.1898	0.0157	0.0227	0.0746	-0.0390	-0.2238	-0.9799
0.4235	1.0488	0.1448	-0.1730	0.0160	0.0220	0.0760	-0.0445	-0.1573	-1.0301
0.4706	1.0440	0.1676	-0.1480	0.0168	0.0200	0.0801	-0.0223	-0.1508	-1.1569

RUN #: [illegible]		M	[illegible]	Uoo	[illegible]
[illegible]		X	[illegible]	α	[illegible]
[illegible]		Y	[illegible]	δ	[illegible]

[illegible]	VELOCITY			RMS			SHEAR STRESS		
	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000 \cdot \overline{U'V'}}{U\infty^2}$	$\frac{1000 \cdot \overline{V'W'}}{U\infty^2}$	$\frac{1000 \cdot \overline{W'U'}}{U\infty^2}$
-0.5176	1.0362	[illegible]	[illegible]	0.0145	0.0156	0.0681	-0.0028	-0.1628	-0.83[illegible]
-0.47[illegible]	1.0362	0.1850	0.1225	0.0146	0.0165	0.0694	-0.0080	-0.1488	-0.88[illegible]
-0.4[illegible]	1.0380	0.1810	0.1243	0.0141	0.0152	0.0678	-0.0086	-0.1202	-0.8[illegible]
-0.3765	1.0392	0.174[illegible]	0.1268	0.0143	0.0166	0.0684	-0.0159	-0.1041	-0.83[illegible]
-0.3294	1.0396	0.1651	0.1333	0.0138	0.0166	0.0664	-0.0105	-0.1534	-0.7704
-0.2824	1.0429	0.1557	0.1375	0.0138	0.0180	0.0648	-0.0291	-0.0864	-0.7584
-0.2353	1.0444	0.1426	0.1404	0.0135	0.0177	0.0642	-0.0276	-0.1163	-0.7287
-0.1882	1.0493	0.1262	0.1449	0.0136	0.0181	0.0674	-0.0180	-0.1777	-0.8226
-0.1412	1.0498	0.1070	0.1375	0.0124	0.0173	0.0587	-0.0228	-0.1095	-0.6055
-0.0941	1.0554	0.0909	0.1494	0.0119	0.0174	0.0556	-0.0252	-0.1199	-0.6078
-0.0471	1.0536	0.0679	0.1155	0.0138	0.0183	0.0650	-0.0198	-0.1282	-0.7543
0.0000	1.0457	0.0484	0.1234	0.0136	0.0197	0.0619	-0.0386	-0.0733	-0.6249
0.0471	1.0412	0.0237	0.0797	0.0138	0.0220	0.0664	-0.0541	-0.0472	-0.6618
0.0941	1.0487	0.0019	0.0204	0.0147	0.0201	0.0692	-0.0286	-0.1395	-0.8363
0.1412	1.0539	-0.0028	-0.0229	0.0146	0.0174	0.0700	-0.0125	-0.1712	-0.8816
0.1882	1.0549	0.0008	-0.0613	0.0147	0.0177	0.0711	-0.0067	-0.1666	-0.9152
0.2353	1.0541	0.0180	-0.1038	0.0151	0.0197	0.0725	-0.0282	-0.1509	-0.9566
0.2824	1.0521	0.0461	-0.1370	0.0145	0.0210	0.0678	-0.0432	-0.1675	-0.8363
0.3294	1.0491	0.0754	-0.1556	0.0148	0.0201	0.0702	-0.0435	-0.1695	-0.8759
0.3765	1.0456	0.1049	-0.1562	0.0146	0.0229	0.0691	-0.0494	-0.1940	-0.8585
0.4235	1.0439	0.1319	-0.1537	0.0154	0.0225	0.0717	-0.0524	-0.1414	-0.941[illegible]

Run#: 059	M = 1.200	U∞=368.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z/C	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5176	1.0370	0.1854	0.1038	0.0132	0.0148	0.0628	-0.0101	-0.0942	-0.6797
-0.4706	1.0384	0.1816	0.1089	0.0141	0.0146	0.0669	-0.0041	-0.1280	-0.8017
-0.4235	1.0385	0.1767	0.1120	0.0134	0.0150	0.0639	-0.0097	-0.1095	-0.7276
-0.3765	1.0406	0.1700	0.1123	0.0141	0.0165	0.0663	-0.0184	-0.1067	-0.7980
-0.3294	1.0406	0.1623	0.1160	0.0134	0.0160	0.0653	-0.0135	-0.1089	-0.7381
-0.2824	1.0415	0.1516	0.1172	0.0133	0.0166	0.0640	-0.0127	-0.1442	-0.7260
-0.2353	1.0433	0.1395	0.1148	0.0135	0.0157	0.0648	-0.0078	-0.1232	-0.7327
-0.1882	1.0453	0.1263	0.1147	0.0135	0.0164	0.0659	-0.0059	-0.1631	-0.7531
-0.1412	1.0470	0.1100	0.1116	0.0138	0.0160	0.0657	-0.0154	-0.0992	-0.7932
-0.0941	1.0495	0.0944	0.1048	0.0140	0.0169	0.0654	-0.0191	-0.1146	-0.7887
-0.0471	1.0501	0.0777	0.0946	0.0138	0.0188	0.0651	-0.0401	-0.0881	-0.7590
0.0000	1.0502	0.0603	0.0787	0.0142	0.0215	0.0666	-0.0595	-0.0844	-0.7899
0.0471	1.0516	0.0433	0.0472	0.0149	0.0216	0.0716	-0.0519	-0.1110	-0.9061
0.0941	1.0530	0.0326	0.0113	0.0146	0.0238	0.0696	-0.0661	-0.1861	-0.8794
0.1412	1.0529	0.0317	-0.0270	0.0151	0.0243	0.0712	-0.0602	-0.1836	-0.9377
0.1882	1.0512	0.0387	-0.0590	0.0155	0.0276	0.0737	-0.0720	-0.2764	-0.9913
0.2353	1.0505	0.0544	-0.0908	0.0159	0.0254	0.0749	-0.0756	-0.1592	-1.0349
0.2824	1.0485	0.0711	-0.1056	0.0160	0.0252	0.0745	-0.0980	-0.0343	-1.0527
0.3294	1.0454	0.0935	-0.1218	0.0144	0.0236	0.0675	-0.0575	-0.1912	-0.8319
0.3765	1.0429	0.1132	-0.1241	0.0142	0.0244	0.0714	-0.0510	-0.2438	-0.8516
0.4235	1.0412	0.1312	-0.1248	0.0142	0.0255	0.0661	-0.0732	-0.1714	-0.7729
0.4706	1.0387	0.1499	-0.1134	0.0147	0.0253	0.0696	-0.0733	-0.1535	-0.8531
0.5176	1.0374	0.1600	-0.1096	0.0147	0.0230	0.0705	-0.0521	-0.1884	-0.8748

Run#: 132	M = 1.200	U∞=372.0 m/s
NOSE:SHARP	X = 5.000 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(in)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0235	1.0211	-0.0199	0.2710	0.0332	0.0340	0.1483	0.1134	-0.1349	0.3406
0.0353	1.0655	-0.0069	0.3272	0.0241	0.0289	0.0951	0.0567	0.0400	-0.1105
0.0471	1.0776	-0.0127	0.2826	0.0166	0.0254	0.0797	-0.0068	0.0490	-0.6861
0.0588	1.0730	-0.0096	0.2451	0.0157	0.0239	0.0731	0.0014	0.0149	-0.9028
0.0706	1.0672	-0.0069	0.2325	0.0146	0.0236	0.0679	0.0036	0.0036	-0.7919
0.0824	1.0637	-0.0041	0.2167	0.0149	0.0198	0.0674	0.0064	-0.0422	-0.83.4
0.0941	1.0624	-0.0030	0.2093	0.0145	0.0189	0.0673	-0.0009	0.0256	-0.8077

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
125	1.2	10	SHARP	9830	5.50	-60	Y
37	1.2	10	SHARP	9830	5.50	0	Z
38	1.2	10	SHARP	9830	5.50	0	Z
46	1.2	10	SHARP	9830	5.50	0	Z
47	1.2	10	SHARP	9830	5.50	0	Z
129	1.2	10	SHARP	9830	5.50	60	Y

Run#: 125	M = 1.200	U∞ = 371.5 m/s
NOSE: SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0118	0.6996	-0.1293	0.2759	0.0506	0.0356	0.1087	-0.6302	0.1215	0.3060
0.0176	0.7203	-0.1274	0.2505	0.0505	0.0380	0.1242	-0.4083	0.9996	0.6180
0.0235	0.7423	-0.1160	0.1789	0.0581	0.0404	0.1434	-0.4020	0.2450	-2.3418
0.0294	0.7774	-0.1092	0.1313	0.0636	0.0382	0.1530	-0.3739	0.6841	-3.2467
0.0353	0.8379	-0.0984	0.0171	0.0850	0.0398	0.1697	-0.2760	0.2022	-7.5881
0.0412	0.8836	-0.1040	-0.1035	0.0722	0.0439	0.2201	-0.2522	0.6813	-7.5241
0.0471	0.9342	-0.1012	-0.2340	0.0543	0.0414	0.2291	-0.0103	0.1898	-3.2277
0.0529	0.9722	-0.0900	-0.2321	0.0518	0.0370	0.1987	0.0533	-0.0651	-2.3652
0.0588	1.0003	-0.0884	-0.2432	0.0487	0.0389	0.1753	-0.0297	-0.1118	-1.7141
0.0647	1.0216	-0.0741	-0.2026	0.0554	0.0337	0.1775	-0.1914	-0.1261	-2.7302
0.0706	1.0645	-0.0829	-0.2214	0.0448	0.0343	0.1578	-0.0015	0.1992	0.3724
0.0824	1.1223	-0.0769	-0.1739	0.0227	0.0287	0.0850	0.0145	0.0704	-1.2301
0.0941	1.1215	-0.0829	-0.1707	0.0183	0.0212	0.0849	-0.0234	0.1357	-1.3528
0.1059	1.1218	-0.0861	-0.1578	0.0179	0.0207	0.0844	-0.0040	0.0894	-1.2476
0.1176	1.1211	-0.0947	-0.1859	0.0184	0.0197	0.0923	-0.0544	0.2851	-1.6319
0.1412	1.1206	-0.0955	-0.1803	0.0176	0.0207	0.0849	0.0037	-0.0134	-1.4131
0.2353	1.1315	-0.0956	-0.1150	0.0192	0.0213	0.0918	-0.0119	0.1117	-1.5064

Run#: 037	M = 1.200	U∞=371.9 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.141 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.1218	0.1501	0.2005	0.0211	0.0244	0.1049	0.0095	-0.5092	-1.8891
-0.5176	1.1185	0.1440	0.2041	0.0214	0.0238	0.1041	-0.0201	-0.3440	-1.9132
-0.4706	1.1130	0.1374	0.2214	0.0225	0.0244	0.1077	-0.0548	-0.2008	-2.1279
-0.4235	1.1108	0.1298	0.2272	0.0222	0.0255	0.1078	-0.0126	-0.3892	-2.1044
-0.3765	1.1093	0.1167	0.2327	0.0217	0.0263	0.1044	-0.0473	-0.2471	-1.9687
-0.3294	1.1094	0.1006	0.2446	0.0228	0.0273	0.1094	-0.0610	-0.2943	-2.1657
-0.2824	1.1094	0.0824	0.2429	0.0224	0.0277	0.1066	-0.0587	-0.2988	-2.0224
-0.2353	1.1090	0.0612	0.2463	0.0205	0.0291	0.0986	-0.0637	-0.3819	-1.6773
-0.1882	1.1015	0.0381	0.2198	0.0210	0.0311	0.1004	-0.0918	-0.2654	-1.6977
-0.1412	1.0747	0.0037	0.0706	0.0223	0.0244	0.0965	-0.0245	-0.6213	-1.7497
-0.0941	1.0815	-0.0250	0.1579	0.0211	0.0315	0.1013	-0.0597	-0.4663	-1.4318
-0.0471	1.0627	-0.0567	0.1396	0.0245	0.0340	0.1177	-0.0662	-0.2145	-1.2621
0.0000	1.0680	-0.1041	0.0618	0.0277	0.0387	0.1241	-0.1965	-0.2108	-1.9511
0.0471	1.0843	-0.1249	0.0072	0.0227	0.0285	0.1092	-0.0857	-0.2433	-1.9669
0.0941	1.0897	-0.1243	-0.0625	0.0216	0.0300	0.1044	-0.0451	-0.3916	-1.8633
0.1412	1.0920	-0.1066	-0.1390	0.0220	0.0325	0.1059	-0.0748	-0.4481	-1.9012
0.1882	1.0921	-0.0669	-0.1965	0.0225	0.0361	0.1062	-0.1426	-0.3339	-1.9661
0.2353	1.0945	-0.0148	-0.2539	0.0236	0.0380	0.1130	-0.1118	-0.5452	-2.1661
0.2824	1.0944	0.0404	-0.2691	0.0222	0.0365	0.1073	-0.1154	-0.4808	-1.7460
0.3294	1.0992	0.0831	-0.2744	0.0234	0.0326	0.1120	-0.0861	-0.3451	-1.9223
0.3765	1.1016	0.1126	-0.2553	0.0237	0.0301	0.1159	-0.0533	-0.4096	-2.0450
0.4235	1.1021	0.1294	-0.2297	0.0210	0.0310	0.0979	-0.1123	-0.2175	-1.4472
0.4706	1.1031	0.1433	-0.2138	0.0207	0.0274	0.0996	-0.0585	-0.2670	-1.5308
0.5176	1.1031	0.1529	-0.1914	0.0225	0.0306	0.1079	-0.0654	-0.3335	-1.8478
0.5647	1.1019	0.1592	-0.1659	0.0243	0.0292	0.1141	-0.0566	-0.3983	-2.2900

Run#: 038	M = 1.200	U∞=371.6 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	1.1204	0.1374	0.1911	0.0148	0.0204	0.0703	-0.0354	-0.1640	-0.8717
-0.5176	1.1130	0.1308	0.1946	0.0150	0.0200	0.0708	-0.0184	-0.2007	-0.8983
-0.4706	1.1095	0.1238	0.2021	0.0154	0.0189	0.0730	-0.0223	-0.1521	-0.9532
-0.4235	1.1070	0.1159	0.2079	0.0156	0.0194	0.0734	-0.0202	-0.1905	-0.9700
-0.3765	1.1081	0.1037	0.2072	0.0158	0.0204	0.0754	-0.0304	-0.1971	-1.0035
-0.3294	1.1078	0.0900	0.2149	0.0150	0.0205	0.0704	-0.0357	-0.1429	-0.8776
-0.2824	1.1089	0.0741	0.2120	0.0150	0.0212	0.0705	-0.0405	-0.1669	-0.8889
-0.2353	1.1105	0.0541	0.2089	0.0151	0.0213	0.0716	-0.0423	-0.1633	-0.8997
-0.1882	1.1083	0.0327	0.2016	0.0161	0.0230	0.0740	-0.0611	-0.1742	-0.9899
-0.1412	1.1014	0.0077	0.1585	0.0163	0.0231	0.0754	-0.0581	-0.2521	-0.8833
-0.0941	1.0807	-0.0151	0.0931	0.0165	0.0209	0.0786	-0.0407	-0.1753	-1.1760
-0.0471	1.0840	-0.0337	0.1052	0.0164	0.0220	0.0761	-0.0542	-0.1563	-0.9243
0.0000	1.0884	-0.0724	0.0615	0.0233	0.0349	0.0993	-0.2003	-0.0563	-1.5550
0.0471	1.0941	-0.0813	0.0064	0.0192	0.0256	0.0904	-0.0663	-0.1501	-1.4885
0.0941	1.0958	-0.0817	-0.0574	0.0185	0.0253	0.0891	-0.0419	-0.2722	-1.3824
0.1412	1.0977	-0.0678	-0.1136	0.0194	0.0261	0.0931	-0.0436	-0.3583	-1.5434
0.1882	1.1004	-0.0428	-0.1649	0.0182	0.0217	0.0877	-0.0191	-0.2946	-1.3571
0.2353	1.1010	-0.0083	-0.1944	0.0192	0.0292	0.0920	-0.0609	-0.3593	-1.4465
0.2824	1.1037	0.0306	-0.2199	0.0191	0.0304	0.0925	-0.0867	-0.3642	-1.4253
0.3294	1.1098	0.0676	-0.2348	0.0196	0.0268	0.0923	-0.0608	-0.2732	-1.4203
0.3765	1.1115	0.0939	-0.2281	0.0195	0.0236	0.0940	-0.0472	-0.2185	-1.5075
0.4235	1.1136	0.1132	-0.1948	0.0188	0.0244	0.0915	-0.0420	-0.2748	-1.5670
0.4706	1.1081	0.1282	-0.1838	0.0205	0.0244	0.1001	-0.0245	-0.3328	-1.7743
0.5176	1.1072	0.1414	-0.1728	0.0208	0.0242	0.1010	-0.0305	-0.2610	-1.8456
0.5647	1.1067	0.1468	-0.1619	0.0205	0.0238	0.0997	-0.0333	-0.2751	-1.8149

Run#: 046	M = 1.200	U∞=370.9 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.024 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.1176	0.9154	-0.1015	0.0471	0.0441	0.0386	0.1754	-0.2780	0.4791	-2.4364
-0.0941	0.9410	-0.1262	-0.0352	0.0459	0.0353	0.1870	-0.1870	0.2048	-3.2579
-0.0471	0.9873	-0.1539	-0.0957	0.0417	0.0310	0.1714	-0.1048	-0.0508	-0.7489
0.0000	1.0363	-0.1683	-0.0027	0.0314	0.0268	0.1315	-0.0402	-0.0857	-0.3209
0.0471	1.0556	-0.1830	0.0731	0.0232	0.0232	0.1012	-0.0125	-0.2481	-0.9713
0.0941	1.0407	-0.2002	0.1081	0.0239	0.0238	0.1120	0.0268	-0.3731	-1.4968
0.1412	1.0069	-0.2063	0.1324	0.0256	0.0253	0.1178	-0.0392	-0.0862	-1.3612
0.1882	0.9668	-0.1922	0.0547	0.0313	0.0327	0.1491	-0.0165	-0.4288	-1.1996
0.2353	0.9407	-0.1505	-0.1778	0.0367	0.0465	0.1805	-0.1266	-1.6059	-3.2948

Run#: 129	M = 1.200	U∞=368.9 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Z = 0.000 cal	δ = 60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0176	0.9629	-0.1422	0.2851	0.0538	0.0433	0.1426	-0.1678	1.2195	-1.3756
0.0235	1.0125	-0.1486	0.2509	0.0354	0.0382	0.1139	-0.0498	0.0960	-0.8208
0.0294	1.0488	-0.1377	0.2551	0.0352	0.0389	0.1356	-0.0452	-0.3040	-0.5487
0.0353	1.0619	-0.1447	0.2191	0.0277	0.0361	0.1220	-0.0902	-0.1711	-1.0988
0.0412	1.0964	-0.1468	0.2406	0.0299	0.0349	0.1305	0.0274	-0.3541	-0.3751
0.0471	1.0661	-0.1487	0.0618	0.0159	0.0269	0.0900	0.0633	-0.4268	-0.7974
0.0529	1.1266	-0.1489	0.2272	0.0209	0.0281	0.0945	0.0275	-0.1766	-0.7689
0.0588	1.1320	-0.1410	0.2321	0.0179	0.0279	0.0844	0.0080	-0.0713	-1.0167
0.0706	1.1299	-0.1479	0.2117	0.0150	0.0203	0.0709	-0.0032	-0.0064	-0.8387
0.0824	1.1343	-0.1392	0.2113	0.0168	0.0262	0.0806	0.0019	-0.0386	-1.0590
0.0941	1.1299	-0.1379	0.1972	0.0149	0.0208	0.0719	0.0074	-0.0369	-0.8797
0.1176	1.1361	-0.1336	0.1874	0.0169	0.0263	0.0817	0.0052	-0.0187	-1.1167

Run#: 047	M = 1.200	U_∞=370.9 m/s
NOSE:SHARP	X = 5.500 cal	α = 10 °
RPM : 9830	Y = 0.047 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.2824	1.0830	0.0927	0.2638	0.0141	0.0149	0.0704	-0.0089	-0.1267	-0.7534
-0.2353	1.0308	0.0724	0.1967	0.0211	0.0182	0.1109	0.0520	-0.2911	-1.3802
-0.1882	0.9713	0.0411	0.2241	0.0456	0.0250	0.2150	0.2724	0.3042	2.6156
-0.1412	0.9007	-0.0332	0.0718	0.0271	0.0351	0.1284	-0.1350	-0.2535	-1.2694
-0.0941	0.9319	-0.1088	-0.0125	0.0358	0.0322	0.1591	-0.1145	0.0143	-2.8430
-0.0471	1.0363	-0.1483	0.0213	0.0367	0.0274	0.1534	0.0058	0.2181	0.4748
0.0000	1.0695	-0.1746	0.0256	0.0211	0.0216	0.0961	-0.0085	-0.1121	-0.9093
0.0471	1.0623	-0.1869	0.0254	0.0196	.0205	0.0945	0.0191	-0.3287	-0.9809
0.0941	1.0367	-0.2009	0.0363	0.0239	0.0211	0.1116	0.0301	-0.3295	-1.4461
0.1412	1.0010	-0.1992	0.0009	0.0289	0.0252	0.1342	0.0240	-0.5261	-1.6632
0.1882	0.9693	-0.1656	-0.1174	0.0363	0.0361	0.1761	-0.0089	-0.9197	-3.0520
0.2353	0.9737	-0.0834	-0.3460	0.0461	0.0477	0.2271	0.1907	-2.2673	-6.9636
0.2824	1.0538	0.0947	-0.3677	0.0398	0.0520	0.1921	0.0443	-0.1765	1.1393

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
151	1.2	20	BLUNT	0	5.00	-60	Y
153	1.2	20	BLUNT	0	5.00	0	Y
154	1.2	20	BLUNT	0	5.00	0	Y
155	1.2	20	BLUNT	0	5.00	0	Y
156	1.2	20	BLUNT	0	5.00	0	Y
157	1.2	20	BLUNT	0	5.00	0	Y
158	1.2	20	BLUNT	0	5.00	0	Y
163	1.2	20	BLUNT	0	5.00	0	Y
159	1.2	20	BLUNT	0	5.00	0	Z
160	1.2	20	BLUNT	0	5.00	0	Z
161	1.2	20	BLUNT	0	5.00	0	Z
162	1.2	20	BLUNT	0	5.00	0	Z

Run#: 151	M = 1.200	U∞= 366.2 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0176	0.9754	-0.0326	-0.4149	0.0607	0.0570	0.2925	-0.4936	2.9261	-13.4339
0.0235	0.9204	-0.1186	-0.0836	0.0925	0.0493	0.4708	-1.5728	8.7695	-39.5545
0.0471	0.9795	-0.0114	-0.0525	0.1032	0.0910	0.4008	1.5047	0.6212	-31.1933
0.0706	1.0673	0.0822	-0.2397	0.0416	0.0350	0.1534	0.1243	1.9215	-3.0567
0.0941	1.0769	0.0711	-0.2624	0.0217	0.0259	0.1064	-0.0667	0.6645	-1.8065
0.1176	1.0739	0.0603	-0.2791	0.0196	0.0253	0.0974	-0.0304	0.6497	-1.3231

Run #: 154	M 1.200	U_∞ 369.6 m/s
NOTE: FLIGHT	X 5.000 cal	α = 20 °
RPM : 7360	Z 0.000 cal	δ 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0588	1.0515	-0.1001	-0.0353	0.0237	0.0289	0.1110	-0.0918	-0.4799	-1.2287
0.0706	1.0529	-0.1315	-0.0297	0.0229	0.0254	0.1057	-0.0291	-0.5731	-1.4784
0.0941	1.0564	-0.1916	-0.0150	0.0219	0.0241	0.1012	-0.0357	-0.3897	-1.3489
0.1176	1.0567	-0.2301	-0.0013	0.0226	0.0270	0.0983	-0.0668	-0.4912	-1.3634
0.1412	1.0573	-0.2510	0.0071	0.0245	0.0277	0.1001	-0.0658	-0.4381	-1.4944
0.1647	1.0556	-0.2530	0.0185	0.0239	0.0267	0.0988	-0.0750	-0.4854	-1.5079
0.1882	1.0545	-0.2354	0.0216	0.0247	0.0295	0.1022	-0.1160	-0.5373	-1.6219
0.2118	1.0517	-0.2064	0.0231	0.0246	0.0253	0.1061	-0.0517	-0.5048	-1.7157
0.2353	1.0481	-0.1758	0.0212	0.0237	0.0252	0.1025	-0.0387	-0.4931	-1.5493
0.2824	1.0422	-0.0998	0.0177	0.0241	0.0251	0.1105	0.0103	-0.6676	-1.7472
0.3294	1.0332	-0.0266	0.0167	0.0240	0.0233	0.1138	0.0089	-0.6335	-1.9586
0.3765	1.0271	0.0299	0.0277	0.0219	0.0210	0.1012	-0.0101	-0.4849	-1.5711
0.4235	1.0182	0.0818	0.0159	0.0218	0.0202	0.1048	0.0114	-0.4870	-1.7212
0.4706	1.0152	0.1205	0.0148	0.0210	0.0189	0.1007	0.0349	-0.5511	-1.6559
0.5176	1.0098	0.1532	0.0281	0.0205	0.0193	0.0980	0.0155	-0.5186	-1.5900
0.5647	1.0036	0.1794	0.0200	0.0214	0.0192	0.1010	0.0239	-0.5790	-1.7519
0.6118	1.0003	0.2029	0.0156	0.0217	0.0186	0.1028	0.0346	-0.6088	-1.8404
0.6588	0.9966	0.2204	0.0122	0.0205	0.0177	0.1013	0.0339	-0.6036	-1.7065
0.7059	0.9960	0.2364	0.0143	0.0202	0.0185	0.1002	0.0544	-0.7211	-1.6924

RUN#: 254	M: 1.200	U∞=372.2 m/s
NOSEBLUNT	X: 5.000 cal	α = 20 °
RPM : 6000	Z: 1.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0471	1.0498	-0.0464	0.0790	0.0302	0.0348	0.1988	0.0787	-3.3424	-3.3252
0.0588	1.0479	-0.0952	0.1233	0.0232	0.0295	0.1384	-0.0801	-1.5255	-1.0752
0.0706	1.0481	-0.1303	0.0928	0.0226	0.0284	0.1356	-0.0860	-1.2095	-0.7982
0.0941	1.0490	-0.1805	0.0282	0.0225	0.0246	0.1176	-0.0102	-0.7948	-1.1449
0.1176	1.0528	-0.2208	-0.0006	0.0225	0.0268	0.1097	-0.0430	-0.4950	-1.2977
0.1412	1.0544	-0.2469	-0.0127	0.0222	0.0249	0.1092	-0.0373	-0.4698	-1.4134
0.1647	1.0549	-0.2551	-0.0204	0.0226	0.0257	0.1088	-0.0623	-0.4491	-1.4682
0.1882	1.0548	-0.2448	-0.0260	0.0230	0.0253	0.1105	-0.0138	-0.4779	-1.6599
0.2118	1.0526	-0.2200	-0.0364	0.0242	0.0264	0.1155	-0.0172	-0.6528	-1.7903
0.2353	1.0495	-0.1861	-0.0527	0.0246	0.0233	0.1207	0.0158	-0.5582	-2.1299
0.2824	1.0451	-0.1044	-0.0857	0.0270	0.0238	0.1302	0.0508	-0.8913	-2.5314
0.3294	1.0363	-0.0319	-0.0658	0.0250	0.0228	0.1216	0.0361	-0.8324	-2.1882
0.3765	1.0256	0.027[illegible]	-0.0517	0.0227	0.0201	0.1092	0.0214	-0.6104	-1.8298
0.4235	1.0184	0.078[illegible]	-0.0491	0.0213	0.0188	0.1043	0.0369	-0.6053	-1.6804
0.4706	1.0114	0.1198	-0.0309	0.0206	0.0169	0.1020	0.0359	-0.4791	-1.6580
0.5176	1.0052	0.1518	-0.0278	0.0214	0.0176	0.1063	0.0588	-0.5701	-1.7362
0.5647	0.9998	0.1798	-0.0221	0.0210	0.0190	0.1064	0.0545	-0.6553	-1.7124
0.6118	0.9967	0.[illegible]027	-0.0238	0.0207	0.0177	0.1031	0.0597	-0.6916	-1.6904
0.6588	0.9924	0.2206	-0.0188	0.0213	0.0168	0.1046	0.0705	-0.6020	-1.7899
0.7059	0.9907	0.[illegible]25[illegible]	-0.0165	0.0207	0.0159	0.1038	0.0563	-0.5295	-1.7158

RUN#: [illegible]	M [illegible]	Uoo 372.[illegible] m/s
[illegible]	X [illegible]	α [illegible]
REM: [illegible]	Z [illegible]	δ [illegible]

	VELOCITY			RMS			SHEAR STRESS		
Y(cm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0588	1.0505	-0.1008	0.1843	0.0315	0.0363	0.1553	-0.0211	-1.7452	-3.4338
0.0706	1.0548	-0.1322	0.1788	0.0296	0.0341	0.1522	-0.0144	-1.7259	-3.1551
0.0941	1.0550	-0.1924	0.0971	0.0304	0.0299	0.1505	0.0557	-1.3937	-3.3461
0.1176	1.0570	-0.2419	0.0399	0.0299	0.0333	0.1413	-0.0747	-1.0610	-3.0415
0.1412	1.0527	-0.2705	-0.0119	0.0301	0.0339	0.1412	-0.1088	-0.9541	-3.0682
0.1647	1.0513	-0.2863	-0.0613	0.0297	0.0347	0.1398	-0.1151	-0.9989	-2.2582
0.1882	1.0504	-0.2790	-0.1066	0.0293	0.0340	0.1433	-0.0969	-0.7931	-2.3877
0.2118	1.0493	-0.2531	-0.1519	0.0331	0.0344	0.1589	-0.0022	-1.2461	-3.4337
0.2353	1.0502	-0.2081	-0.1893	0.0300	0.0328	0.1486	0.0943	-1.5936	-3.0907
0.2824	1.0485	-0.0991	-0.2498	0.0339	0.0310	0.1664	0.0924	-1.5979	-4.5807
0.3294	1.0348	-0.0210	-0.1775	0.0326	0.0264	0.1656	0.1605	-1.7118	-4.7242
0.3765	1.0250	0.0415	-0.1533	0.0289	0.0244	0.1440	0.1160	-1.4046	-3.5247
0.4235	1.0154	0.0913	-0.1114	0.0220	0.0216	0.1117	0.0503	-0.9091	-1.9948
0.4706	1.0091	0.1280	-0.0785	0.0219	0.0184	0.1118	0.0765	-0.7755	-2.0460
0.5176	1.0032	0.1607	-0.0685	0.0225	0.0200	0.1090	0.0310	-0.6701	-2.0148
0.5647	0.9980	0.1849	-0.0591	0.0214	0.0196	0.1071	0.0588	-0.7702	-1.8328
0.6118	0.9924	0.2060	-0.0491	0.0211	0.0174	0.1066	0.0742	-0.7244	-1.8246
0.6588	0.9911	0.2248	-0.0401	0.0208	0.0177	0.1071	0.0831	-0.8035	-1.7856
0.7059	0.9897	0.2399	-0.0432	0.0229	0.0175	0.1170	0.0946	-0.8413	-2.2579

Run#: 156	M 1.200	U∞ 373.1 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Z = 0.212 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0588	1.0533	-0.1517	0.3606	0.0264	0.0302	0.1219	-0.0595	-0.9176	-1.9022
0.0706	1.0506	-0.1703	0.3323	0.0251	0.0295	0.1209	-0.0484	-0.6867	-1.7496
0.0941	1.0495	-0.2141	0.2069	0.0271	0.0311	0.1277	-0.0400	-0.5526	-1.4762
0.1176	1.0496	-0.2343	0.1364	0.0313	0.0505	0.1464	-0.4617	-0.9591	-1.8636
0.1412	1.0535	-0.2165	0.0605	0.0407	0.0677	0.1803	-0.8148	-1.7863	-3.0486
0.1647	1.0638	-0.1626	-0.0810	0.0453	0.0737	0.1997	-1.0617	-2.6351	-4.4564
0.1882	1.0567	-0.1198	-0.1188	0.0463	0.0812	0.2032	-1.4755	-3.3416	-4.7709
0.2118	1.0092	-0.0898	-0.3297	0.0518	0.0866	0.2182	-1.5321	-3.6977	-3.6860
0.2353	1.0391	-0.0755	-0.3674	0.0422	0.0786	0.1800	-1.1937	-3.2982	-4.5733
0.2824	1.0406	-0.0109	-0.3717	0.0334	0.0532	0.1497	-0.5634	-1.5479	-3.5892
0.3294	1.0292	0.0423	-0.2814	0.0235	0.0296	0.1129	-0.1243	-0.7783	-2.0753
0.3765	1.0210	0.0864	-0.2219	0.0212	0.0248	0.1025	-0.0505	-0.6934	-1.6998
0.4235	1.0149	0.1283	-0.1684	0.0202	0.0191	0.0974	0.0406	-0.7006	-1.6563
0.4706	1.0085	0.1582	-0.1378	0.0208	0.0200	0.1014	0.0097	-0.6072	-1.7602
0.5176	1.0034	0.1837	-0.1201	0.0204	0.0189	0.0990	0.0332	-0.6081	-1.6859
0.5647	0.9975	0.2050	-0.0989	0.0209	0.0178	0.1050	0.0583	-0.7087	-1.8801
0.6118	0.9953	0.2205	-0.0879	0.0194	0.0157	0.0966	0.0520	-0.5455	-1.5821
0.6588	0.9926	0.2351	-0.0679	0.0199	0.0160	0.0995	0.0580	-0.5933	-1.6718
0.7059	0.9879	0.2472	-0.0559	0.0210	0.0174	0.1038	0.0578	-0.6542	-1.8211

Run#: 157	M = 1.200	U_∞ = 372.6 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Z = 0.282 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty\hat{}2}$	$\frac{1000*\overline{V'W'}}{U_\infty\hat{}2}$	$\frac{1000*\overline{W'U'}}{U_\infty\hat{}2}$
0.0588	1.0620	-0.1570	0.2753	0.0482	0.0357	0.2441	0.3707	-3.0910	-8.5534
0.0706	1.0686	-0.1498	0.1377	0.0594	0.0440	0.3082	0.7763	-5.7362	-15.0574
0.0941	1.0738	-0.1309	0.0558	0.0584	0.0583	0.2819	-0.1493	-3.7080	-11.2273
0.1176	1.0629	-0.0916	-0.0139	0.0527	0.0675	0.2534	-0.4819	.4663	-8.3175
0.1412	1.0799	-0.0045	-0.1074	0.0584	0.0743	0.2640	-0.6781	.9399	-1.1691
0.1647	1.0160	0.0509	-0.3869	0.0509	0.0725	0.2172	-1.1781	-0.8583	-1.2092
0.1882	1.0274	0.0920	-0.3239	0.0487	0.0813	0.2108	-1.2012	-2.4861	-0.9990
0.2118	1.0242	0.1642	-0.4494	0.0377	0.0670	0.1551	-0.7703	-1.6142	-2.8945
0.2353	1.0270	0.1657	-0.4890	0.0353	0.0635	0.1366	-0.9899	-0.9317	-2.5445
0.2824	1.0237	0.1592	-0.4389	0.0282	0.0491	0.1157	-0.5725	-0.9772	-1.9308
0.3294	1.0168	0.1515	-0.3539	0.0254	0.0361	0.1114	-0.2859	-0.5821	-2.0346
0.4235	1.0067	0.1861	-0.2266	0.0224	0.0245	0.1081	-0.0299	-0.7264	-1.9257
0.5176	1.0000	0.2165	-0.1525	0.0210	0.0193	0.1045	0.0454	-0.7324	-1.8169
0.6118	0.9947	0.2387	-0.1104	0.0205	0.0172	0.1013	0.0465	-0.6189	-1.7325
0.7059	0.9878	0.2585	-0.0781	0.0219	0.0177	0.1100	0.0635	-0.7566	-2.0125

Run.# : 158	M = 1.200	U∞= 372.5 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Z = 0.353 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0706	1.0723	-0.0310	0.0887	0.0590	0.0616	0.3066	0.1344	-5.7873	-13.3221
0.1176	1.0374	0.0994	-0.1352	0.0510	0.0641	0.2279	-0.6647	-2.7036	-6.8873
0.1412	1.0233	0.1451	-0.1994	0.0489	0.0675	0.2219	-0.8098	-2.5657	-6.2342
0.1647	1.0021	0.2197	-0.2713	0.0531	0.0842	0.2265	-1.6632	-3.9413	-7.2122
0.1882	0.9909	0.2680	-0.3138	0.0550	0.0921	0.2317	-1.9792	-3.9369	-8.3207
0.2118	0.9867	0.3312	-0.4111	0.0409	0.0841	0.1587	-1.8147	-1.6558	-3.7279
0.2353	0.9982	0.3244	-0.4664	0.0328	0.0698	0.1119	-1.5132	0.2498	-1.7850
0.2824	1.0069	0.2627	-0.4250	0.0196	0.0320	0.0841	-0.2294	-0.3564	-1.0513
0.3294	1.0069	0.2359	-0.3527	0.0157	0.0243	0.0717	-0.1282	-0.3101	-0.7140
0.3765	1.0044	0.2265	-0.2861	0.0160	0.0190	0.0778	-0.0321	-0.3841	-0.9381
0.4235	1.0039	0.2267	-0.2383	0.0150	0.0171	0.0709	-0.0336	-0.3131	-0.8396
0.4706	1.0001	0.2305	-0.1948	0.0149	0.0155	0.0708	-0.0100	-0.2841	-0.8453
0.5176	0.9967	0.2383	-0.1733	0.0148	0.0150	0.0731	-0.0005	-0.3261	-0.8874
0.6118	0.9905	0.2552	-0.1214	0.0154	0.0155	0.0735	-0.0041	-0.3153	-0.9193
0.7059	0.9867	0.2694	-0.0900	0.0150	0.0148	0.0738	0.0127	-0.3477	-0.9068

Run.#: 165	M = 1.200	U∞=371.8 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Z = -.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0471	1.0574	-0.1590	-0.4155	0.0258	0.0278	0.1229	-0.0860	0.2950	0.4761
0.0588	1.0653	-0.1746	-0.3310	0.0224	0.0249	0.1023	-0.0709	-0.2747	-0.7861
0.0706	1.0625	-0.1838	-0.2898	0.0244	0.0340	0.1077	-0.2251	-0.1835	-1.0743
0.0941	1.0489	-0.1943	-0.1954	0.0293	0.0488	0.1342	-0.6333	-0.4680	-1.9447
0.1176	1.0379	-0.1692	-0.2065	0.0452	0.0680	0.1943	-0.9808	-2.6004	-4.7961
0.1412	1.0177	-0.1646	-0.0998	0.0419	0.0723	0.1721	-1.5309	-1.0616	-4.0580
0.1882	0.9911	-0.0787	0.0389	0.0427	0.0713	0.1732	-1.4307	-1.1489	-4.2893
0.2353	1.0247	-0.0871	0.2448	0.0317	0.0593	0.1169	-1.1132	-0.4251	-0.9771
0.2824	1.0275	-0.0236	0.2754	0.0195	0.0304	0.0875	-0.1717	-0.2059	-0.7992
0.3294	1.0255	0.0385	0.2153	0.0181	0.0253	0.0835	-0.1093	-0.3948	-1.0067
0.3765	1.0194	0.0903	0.1670	0.0171	0.0208	0.0800	-0.0610	-0.3124	-0.9886
0.4235	1.0151	0.1292	0.1265	0.0168	0.0166	0.0791	0.0016	-0.3540	-1.0197
0.4706	1.0097	0.1603	0.0984	0.0163	0.0184	0.0771	-0.0287	-0.3450	-0.9357
0.5647	1.0035	0.2090	0.0697	0.0178	0.0188	0.0860	-0.0181	-0.4436	-1.2168
0.6588	0.9974	0.2401	0.0417	0.0185	0.0178	0.0890	-0.0020	-0.4463	-1.3349

Run#: 159	M = 1.200	U∞=372.5 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Y = 0.282 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.5647	0.9805	0.4467	0.1993	0.0250	0.0189	0.1265	0.0988	-0.9491	-2.8427
-0.4706	0.9826	0.4424	0.2618	0.0230	0.0185	0.1124	0.0905	-0.8526	-2.2658
-0.4235	0.9833	0.4353	0.3021	0.0207	0.0171	0.1017	0.0660	-0.6136	-1.7832
-0.3765	0 9868	0.4248	0.3366	0.0206	0.0179	0.1033	0.0541	-0.6253	-1.7762
-0.3294	0.9927	0.4068	0.3668	0.0251	0.0194	0.1248	0.0848	-0.8433	-2.7911
-0.2824	0.9983	0.3752	0.4012	0.0248	0.0229	0.1250	0.0936	-1.0345	-2.7482
-0.2353	1.0029	0.3227	0.4310	0.0241	0.0266	0.1154	-0.0107	-0.8477	-2.3516
-0.1882	1.0109	0.2499	0.4329	0.0238	0.0300	0.1146	-0.0674	-0.7080	-2.1953
-0.1412	1.0148	0.1541	0.3958	0.0229	0.0330	0.1025	-0.2265	-0.5647	-1.7391
-0.0941	1.0239	0.0525	0.3330	0.0234	0.0336	0.1051	-0.2146	-0.4044	-1.5400
-0.0471	1.0302	-0.0359	0.2072	0.0213	0.0286	0.0983	-0.1075	-0.5919	-1.4125
0.0000	1.0382	-0.0819	0.1269	0.0200	0.0232	0.0928	-0.0455	-0.4042	-1.3696
0.0471	1.0414	-0.1022	0.0273	0.0184	0.0221	0.0876	-0.0484	-0.3704	-1.1222
0.0941	1.0414	-0.1100	-0.0680	0.0191	0.0215	0.0905	-0.0223	-0.4505	-1.2577
0.1412	1.0430	-0.1117	-0.1717	0.0190	0.0234	0.0893	-0.0125	-0.4688	-1.1860
0.1882	1.0501	-0.0981	-0.2831	0.0223	0.0303	0.1054	0.0022	-0.6557	-1.6443
0.2353	1.0529	-0.0255	-0.3872	0.0256	0.0514	0.1113	-0.4801	-0.6723	-1.7046
0.2824	1.0348	0.1121	-0.4379	0.0261	0.0506	0.1061	-0.5940	-0.6853	-1.5424
0.3294	1.0170	0.2108	-0.4340	0.0226	0.0409	0.0982	-0.3564	-0.5750	-1.1581
0.3529	1.0089	0.2573	-0.4278	0.0200	0.0343	0.0848	-0.2679	-0.4754	-1.0611
0.4000	0.9903	0.3282	-0.3890	0.0179	0.0268	0.0814	-0.1417	-0.2694	-1.0421
0.4471	0.9768	0.3760	-0.3473	0.0172	0.0214	0.0806	-0.0635	-0.3744	-1.0279
0.4941	0.9660	0.4062	-0.2976	0.0155	0.0168	0.0755	-0.0019	-0.3274	-0.9293
0.5412	0.9604	0.4234	-0.2572	0.0140	0.0139	0.0701	0.0114	-0.2823	-0.7699
0.5882	0.9578	0.4338	-0.2274	0.0147	0.0138	0.0708	0.0140	-0.2850	-0.8209
0.6588	0.9567	0.4395	-0.1786	0.0156	0.0144	0.0755	0.0162	-0.2672	-0.7433

Run#: 160	M = 1.200	U_∞ = 372.3 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Y = 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty{}^2}$	$\frac{1000*\overline{V'W'}}{U_\infty{}^2}$	$\frac{1000*\overline{W'U'}}{U_\infty{}^2}$
-0.5647	0.9721	0.4815	0.2027	0.0229	0.0185	0.1162	0.0889	-0.8519	-2.3011
-0.4706	0.9720	0.4939	0.2616	0.0215	0.0176	0.1077	0.0831	-0.7057	-1.9351
-0.3765	0.9739	0.5095	0.3542	0.0211	0.0180	0.1024	0.0316	-0.4631	-1.5395
-0.2824	0.9750	0.5077	0.4429	0.0255	0.0266	0.1172	-0.0833	-0.7123	-1.4214
-0.2353	0.9787	0.4717	0.4549	0.0351	0.0479	0.1518	-0.5221	-1.3674	-2.6232
-0.1412	1.0369	0.1630	0.2733	0.0540	0.0748	0.2558	-0.8181	1.3101	1.3628
-0.0941	1.0215	0.0082	0.0244	0.0497	0.0701	0.2290	-1.0158	-2.4047	-6.8571
-0.0471	1.0254	-0.1493	0.0949	0.0432	0.0934	0.1332	-2.9428	-0.9487	-2.6174
0.0000	1.0620	-0.2647	0.0880	0.0204	0.0291	0.0845	-0.2011	-0.2673	-1.0352
0.0471	1.0587	-0.2559	0.0571	0.0169	0.0257	0.0771	-0.1184	-0.2785	-0.7742
0.0941	1.0517	-0.2513	0.0283	0.0176	0.0253	0.0813	-0.1062	-0.3180	-0.7644
0.1412	1.0473	-0.2695	-0.0188	0.0209	0.0278	0.0917	-0.1430	-0.2704	-0.7585
0.1882	1.0452	-0.2758	-0.0697	0.0257	0.0333	0.1197	-0.1847	-0.3925	-1.3969
0.2353	1.0423	-0.1290	-0.1291	0.0497	0.0823	0.2180	-1.3432	-3.7374	-5.7326
0.2824	1.0409	0.0199	-0.2295	0.0488	0.0802	0.2138	-1.2408	-3.8567	-6.3685
0.3294	1.0177	0.1445	-0.2973	0.0473	0.0870	0.2000	-1.6763	-3.6873	-5.3589
0.3765	0.9658	0.3011	-0.4281	0.0484	0.0954	0.1983	-1.9776	0.3362	-1.5418
0.4235	0.9483	0.4699	-0.3687	0.0281	0.0522	0.1006	-0.7989	-0.2241	-1.2199
0.4706	0.9454	0.5190	-0.3219	0.0179	0.0225	0.0835	-0.0786	-0.1991	-0.8562
0.5176	0.9445	0.5109	-0.2750	0.0169	0.0184	0.0791	-0.0284	-0.2513	-1.0070
0.5647	0.9440	0.5049	-0.2361	0.0162	0.0159	0.0773	-0.0009	-0.3195	-1.0182
0.6588	0.9469	0.4854	-0.1816	0.0141	0.0134	0.0677	0.0001	-0.2392	-0.7802

Run#: 161	M = 1.200	U_∞ = 372.3 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.2353	1.0281	0.1288	-0.1570	0.0462	0.0580	0.2113	-0.6039	-1.6878	-5.1248
-0.1882	1.0668	0.0087	-0.1199	0.0450	0.0534	0.2191	-0.2914	-2.3174	-5.4769
-0.1412	1.0891	-0.0857	-0.1073	0.0477	0.0510	0.2262	-0.2405	-1.6241	-4.7336
-0.1176	1.0902	-0.1347	-0.1721	0.0482	0.0532	0.2308	-0.2362	-0.3994	-3.2443
-0.0941	1.0741	-0.1774	-0.2583	0.0380	0.0446	0.1799	-0.2432	-1.0555	-5.2285
-0.0471	1.0754	-0.1822	-0.2252	0.0229	0.0259	0.1061	-0.0641	-0.4099	-1.4155
0.0000	1.0652	-0.1538	-0.1552	0.0198	0.0225	0.0922	-0.0449	-0.3107	-0.9705
0.0471	1.0657	-0.1168	-0.0061	0.0211	0.0227	0.0994	-0.0268	-0.1689	-0.5271
0.0941	1.0471	-0.1071	0.0694	0.0187	0.0220	0.0891	-0.0301	-0.4621	-0.9998
0.1412	1.0427	-0.1166	0.1953	0.0193	0.0239	0.0864	-0.0868	-0.3400	-1.0181
0.1882	1.0461	-0.1397	0.2559	0.0230	0.0250	0.1086	-0.0387	-0.5981	-1.3758
0.2353	1.0466	-0.1544	0.3263	0.0243	0.0265	0.1186	-0.0126	-0.5317	-0.9736
0.2824	1.0525	-0.1619	0.2950	0.0379	0.0333	0.1977	0.1121	-1.7041	-4.5681
0.3294	1.0585	-0.0764	0.1195	0.0539	0.0531	0.2700	-0.0074	-4.2404	-11.1186
0.3765	1.0441	0.0940	-0.0147	0.0478	0.0540	0.2361	-0.1484	-2.4608	-6.5591
0.4235	1.0273	0.1581	-0.0808	0.0422	0.0457	0.2094	-0.1159	-1.7420	-4.5177
0.4706	1.0178	0.2522	-0.2108	0.0504	0.1105	0.1432	-4.2682	-1.0802	-2.1640

Run#: 162	M = 1.200	U∞= 372.3 m/s
NOSE:BLUNT	X = 5.000 cal	α = 20 °
RPM : 0000	Y = 0.118 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.2824	0.9149	0.4843	0.0472	0.0509	0.0861	0.2154	-1.9680	2.8112	0.2282
-0.2353	0.9943	0.2472	-0.1046	0.0479	0.0818	0.1857	-2.0838	-1.5261	-2.1481
-0.1882	1.0306	0.1334	-0.1583	0.0497	0.0644	0.2219	-0.9657	-1.7264	-6.6080
-0.1412	1.0533	0.0431	-0.1424	0.0522	0.0737	0.2383	-1.1110	-3.2957	-7.5902
-0.0941	1.0694	-0.0848	-0.0517	0.0534	0.0802	0.2362	-1.2280	-3.8318	-7.2170
-0.0471	1.0618	-0.1813	0.0117	0.0467	0.0934	0.1853	-2.3858	-0.6313	-2.7281
0.0000	1.0663	-0.2541	-0.0261	0.0202	0.0287	0.0895	-0.1958	-0.3469	-0.9881
0.0471	1.0575	-0.2317	0.0161	0.0180	0.0262	0.0807	-0.1003	-0.3673	-0.8781
0.0941	1.0518	-0.2195	0.0615	0.0184	0.0235	0.0831	-0.0860	-0.3213	-0.9121
0.1412	1.0494	-0.2291	0.0838	0.0194	0.0261	0.0908	-0.1105	-0.4302	-0.9611
0.1882	1.0470	-0.2373	0.0927	0.0246	0.0305	0.1146	-0.1236	-0.7971	-1.9095
0.2118	1.0568	-0.2256	0.0115	0.0417	0.0380	0.2053	0.0507	-2.3066	-6.8824
0.2353	1.0594	-0.1992	0.0001	0.0467	0.0573	0.2279	-0.3705	-3.6846	-8.4918
0.2824	1.0768	-0.0881	-0.1143	0.0535	0.0582	0.2690	-0.1333	-4.0812	-10.8709
0.3294	1.0554	0.0670	-0.1358	0.0525	0.0719	0.2355	-0.9990	-3.2673	-7.3398
0.3765	1.0241	0.1664	-0.1372	0.0460	0.0581	0.2130	-0.5373	-1.5733	-5.5723
0.4000	0.9992	0.1939	-0.2251	0.0480	0.0526	0.2332	-0.2047	-2.5093	-6.2771
0.4235	1.0094	0.2338	-0.2313	0.0385	0.0567	0.1721	-0.6793	-1.4775	-3.6591
0.4706	0.9410	0.4962	-0.2378	0.0380	0.0933	0.1104	-2.6220	-0.5278	-1.2664
0.5176	0.9293	0.5538	-0.2029	0.0179	0.0221	0.0851	-0.0761	-0.2612	-0.8809
0.5647	0.9335	0.5407	-0.1909	0.0147	0.0171	0.0708	-0.0319	-0.1966	-0.7018
0.6588	0.9393	0.5092	-0.1482	0.0156	0.0129	0.0753	0.0294	-0.3149	-0.9960

Run	Mach	Alpha (deg)	Nose	Spin (RPM)	X (cal)	Delta (deg)	Scan
149	1.2	20	SHARP	0	5.00	-60	Y
146	1.2	20	SHARP	0	5.00	0	Y
147	1.2	20	SHARP	0	5.00	0	Y
148	1.2	20	SHARP	0	5.00	0	Y
142	1.2	20	SHARP	0	5.00	0	Z
143	1.2	20	SHARP	0	5.00	0	Z
144	1.2	20	SHARP	0	5.00	0	Z
145	1.2	20	SHARP	0	5.00	0	Z

Run#: 149	M = 1.200	U∞=366.9 m/s
NOSE:SHARP	X = 5.000 cal	α = 20 °
REM : 0000	Z = 0.000 cal	δ = -60 °

	VELOCITY			RMS			SHEAR STRESS		
Y(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
0.0235	0.9984	-0.0678	-0.3306	0.0619	0.1409	0.3103	-0.9885	6.4880	-13.5208
0.0353	0.9481	-0.1114	-0.0847	0.0872	0.0524	0.4393	-1.5273	8.9815	-31.9486
0.0471	1.0123	0.0079	-0.1287	0.0862	0.1043	0.3185	4.2952	-3.9966	-19.6410
0.0588	1.0257	0.0425	-0.2260	0.0623	0.0694	0.2133	0.8006	-0.1280	-7.4792
0.0706	1.0689	0.0823	-0.2500	0.0338	0.0325	0.1447	-0.1118	0.9411	-3.1932
0.0941	1.0647	0.0740	-0.2277	0.0332	0.0294	0.1671	-0.2218	1.3956	-4.9523
0.1176	1.0622	0.0634	-0.2110	0.0344	0.0279	0.1738	-0.2193	1.6945	-5.3892

Run#: 14*	M = 1.200	U∞ = 368.2 m/s
CASE:SHAR	X = 5.000 cm	α = 20 °
RPM : 6000	Z = 0.000 cm	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Y (cm)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0471	1.0611	-0.0738	-0.0772	0.0239	0.0266	0.1139	-0.0648	-0.4485	-1.0969
0.0588	1.0622	-0.1111	-0.0738	0.0243	0.0280	0.1160	-0.0954	-0.2461	-1.2158
0.0706	1.0630	-0.1474	-0.0670	0.0249	0.0281	0.1151	-0.0842	-0.4301	-1.3040
0.0941	1.0649	-0.2109	-0.0568	0.0230	0.0278	0.1038	-0.1073	-0.3752	-1.3290
0.1176	1.0661	-0.2577	-0.0357	0.0227	0.0306	0.1056	-0.1477	-0.5061	-1.4637
0.1412	1.0675	-0.2808	-0.0279	0.0229	0.0323	0.1024	-0.1752	-0.5885	-1.5353
0.1647	1.0648	-0.2810	-0.0201	0.0230	0.0329	0.1063	-0.1683	-0.8273	-1.6250
0.1882	1.0652	-0.2642	-0.0178	0.0235	0.0326	0.1045	-0.1842	-0.5719	-1.6667
0.2118	1.0599	-0.2298	-0.0153	0.0233	0.0333	0.1045	-0.2004	-0.5747	-1.6620
0.2353	1.0556	-0.1889	-0.0440	0.0246	0.0308	0.1167	-0.0724	-0.9015	-2.1413
0.2824	1.0487	-0.0947	-0.0480	0.0268	0.0304	0.1288	-0.0680	-0.9717	-2.7725
0.3294	1.0424	-0.0150	-0.0505	0.0276	0.0307	0.1353	-0.0395	-1.1981	-3.1020
0.3765	1.0329	0.0495	-0.0393	0.0245	0.0274	0.1164	-0.0429	-0.8673	-2.3701
0.4706	1.0198	0.1412	-0.0262	0.0226	0.0247	0.1066	-0.0550	-0.6886	-1.9817
0.5882	1.0088	0.2110	-0.0142	0.0225	0.0231	0.1113	0.0059	-0.7673	-2.0915
0.7059	1.0020	0.2518	-0.0040	0.0220	0.0234	0.1067	-0.0226	-0.6907	-1.9390

[illegible]	M [illegible]	U_∞ [illegible]	
[illegible]	X [illegible]	α 20 °	
[illegible]	Z [illegible]	δ 0 °	

	VELOCITY			RMS			SHEAR STRESS		
Y(inch)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0471	1.0071	0.2385	-0.0525	0.0210	0.0298	0.0901	-0.2007	-0.4262	-1.3073
0.0588	1.0140	0.2025	-0.0780	0.0206	0.0318	0.0932	-0.2435	-0.4821	-1.2506
0.0706	1.0218	0.1530	-0.1016	0.0207	0.0324	0.0897	-0.2522	-0.4981	-1.1822
0.0941	1.0270	0.1164	-0.1340	0.0211	0.0359	0.0905	-0.3231	-0.4986	-1.1797
0.1176	1.0334	0.0712	-0.1720	0.0227	0.0400	0.0908	-0.4539	-0.4065	-1.2282
0.1412	1.0378	0.0142	-0.2073	0.0240	0.0440	0.0941	-0.5661	-0.3673	-1.1401
0.1647	1.0477	-0.0800	-0.2430	0.0238	0.0375	0.1010	-0.3312	-0.5045	-1.3512
0.1882	1.0544	-0.1650	-0.2533	0.0307	0.0605	0.1247	-0.9414	-1.2808	-1.8747
0.2118	1.0547	-0.2742	-0.0874	0.0241	0.0297	0.1108	-0.0795	-0.7048	-1.4602
0.2353	1.0579	-0.2894	0.0532	0.0209	0.0289	0.0954	-0.1378	-0.3813	-1.0253
0.2824	1.0549	-0.2953	-0.0041	0.0227	0.0298	0.1029	-0.1495	-0.4307	-1.1717
0.3294	1.0613	-0.2605	0.1244	0.0214	0.0288	0.0910	-0.1576	-0.3611	-1.0705
0.3765	1.0539	-0.2399	-0.1612	0.0254	0.0332	0.1144	-0.0999	-0.8210	-1.5865
0.4235	1.0648	-0.2078	0.1876	0.0206	0.0270	0.0943	-0.1293	-0.3469	-0.9890
0.4706	1.0627	-0.1443	0.2334	0.0211	0.0277	0.0937	-0.1438	-0.3379	-1.0252
0.5647	1.0614	-0.0713	0.2677	0.0220	0.0305	0.0971	-0.1944	-0.2376	-0.9830
0.6588	1.0479	-0.1157	-0.2482	0.0341	0.0758	0.1064	-1.7538	-0.7847	-1.3528

RUN#: [illegible]	M [illegible]	[illegible]	
NOTE: [illegible]	X [illegible]	α	[illegible]
RUN : [illegible]	[illegible]	δ	[illegible]

	VELOCITY			RMS			SHEAR STRESS		
Y (inch)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
0.0471	1.0614	-0.0715	0.2677	0.0275	0.0395	0.0971	-0.1944	-0.2376	-0.9847
0.0706	1.0627	-0.1443	0.2334	0.0272	0.0377	0.0937	-0.1438	-0.3379	-1.0252
0.0941	1.0643	-0.2078	0.1876	0.0266	0.0370	0.0943	-0.1293	-0.3469	-0.9950
0.1176	1.0613	-0.2605	0.1244	0.0274	0.0388	0.0910	-0.1376	-0.3611	-1.0705
0.1412	1.0579	-0.2894	0.0532	0.0290	0.0389	0.0954	-0.1378	-0.3817	-1.0253
0.1647	1.0549	-0.2953	-0.0041	0.0227	0.0296	0.1029	-0.1435	-0.4307	-1.1717
0.1882	1.0547	-0.2742	-0.0874	0.0241	0.0297	0.1108	-0.0795	-0.7048	-1.4602
0.2118	1.0539	-0.2399	-0.1612	0.0254	0.0332	0.1144	-0.0999	-0.8210	-1.5865
0.2353	1.0544	-0.1650	-0.2533	0.0307	0.0605	0.1247	-0.9414	-1.2808	-1.8747
0.2588	1.0479	-0.1157	-0.2482	0.0341	0.0758	0.1064	-1.7538	-0.7847	-1.3528
0.2824	1.0477	-0.0806	-0.2430	0.0238	0.0375	0.1010	-0.3312	-0.5045	-1.3512
0.3294	1.0378	0.0142	-0.2073	0.0240	0.0440	0.0941	-0.5661	-0.3673	-1.1901
0.3765	1.0334	0.0712	-0.1720	0.0227	0.0400	0.0908	-0.4539	-0.4065	-1.2281
0.4235	1.0270	0.1164	-0.1340	0.0211	0.0359	0.0905	-0.3231	-0.4986	-1.1797
0.4706	1.0218	0.1530	-0.1016	0.0207	0.0324	0.0897	-0.2522	-0.4981	-1.1822
0.5647	1.0130	0.2025	-0.0780	0.0206	0.0318	0.0932	-0.2435	-0.4821	-1.2506
0.6588	1.0071	0.2385	-0.0525	0.0210	0.0298	0.0901	-0.2007	-0.4262	-1.3073

RUN#: [illegible]	M [illegible]	[illegible]	
[illegible]	R [illegible]	α [illegible]	
RPM: [illegible]	Y 0.047 [illegible]	δ [illegible]	

	VELOCITY			RMS			SHEAR STRESS		
Z/(Y+1)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
-0.0941	0.9563	0.1811	-0.6469	0.0628	0.0459	0.2966	0.2138	1.7149	-0.5642
-0.0706	1.0803	-0.1475	-0.2160	0.0203	0.0247	0.0930	-0.0809	0.0841	0.2921
-0.0471	0.9666	0.0991	-0.5959	0.0532	0.0527	0.2617	-0.3112	1.0236	0.6472
-0.0235	1.0687	-0.1018	-0.0964	0.0195	0.0234	0.0907	-0.0742	-0.0459	-0.1836
0.0000	1.0641	-0.0842	-0.0394	0.0184	0.0203	0.0883	-0.0336	-0.1431	-0.2660
0.0235	1.0614	-0.0726	0.0333	0.0185	0.0203	0.0851	-0.0438	-0.0909	-0.4030
0.0706	1.0528	-0.0619	0.1709	0.0175	0.0210	0.0871	-0.0302	-0.2709	-0.4641
0.1176	1.0463	-0.0783	0.3126	0.0187	0.0231	0.0865	-0.0738	-0.2529	-0.6999
0.1647	1.0446	-0.1099	0.3914	0.0225	0.0281	0.1007	-0.1248	-0.3196	-0.8202
0.1882	1.0460	-0.1526	0.3497	0.0319	0.0383	0.1710	-0.0517	-1.3611	-1.6654
0.2353	1.0543	-0.1476	0.2755	0.0536	0.0466	0.2678	0.1198	-3.0480	-9.7301
0.2824	1.0506	-0.0717	0.2199	0.0529	0.0639	0.2526	-0.7384	-2.0346	-8.2697
0.3294	1.0566	0.0099	0.0521	0.0525	0.0663	0.2443	-0.7679	-1.7426	-6.9534
0.3529	1.0705	0.0239	-0.0913	0.0624	0.0610	0.3174	0.2348	-2.7490	-7.7446
0.3765	1.0083	0.0721	-0.2585	0.0653	0.0674	0.3192	0.0029	-0.5309	-1.6575
0.4000	1.0285	0.1048	-0.2838	0.0614	0.0611	0.3018	0.0640	-0.4286	-2.4512
0.4706	1.0078	0.2898	-0.0516	0.0699	0.1352	0.2592	-5.6685	-4.0271	-12.2350
0.5176	1.0047	0.3022	-0.0695	0.0710	0.1405	0.2544	-6.3049	-4.1651	-12.1596
0.5647	1.0072	0.2981	-0.0673	0.0692	0.1402	0.2590	-5.7475	-6.4130	-11.9305

[illegible]	M [illegible]	[illegible]
NOSE: SHARP	X 5.000 cal	α 20.0
[illegible]	Y 0.004 cal	δ 0.0

	VELOCITY			RMS			SHEAR STRESS		
Z (cal)	$\frac{\overline{U}}{U_\infty}$	$\frac{\overline{V}}{U_\infty}$	$\frac{\overline{W}}{U_\infty}$	$\frac{\overline{U'}}{U_\infty}$	$\frac{\overline{V'}}{U_\infty}$	$\frac{\overline{W'}}{U_\infty}$	$\frac{1000*\overline{U'V'}}{U_\infty^2}$	$\frac{1000*\overline{V'W'}}{U_\infty^2}$	$\frac{1000*\overline{W'U'}}{U_\infty^2}$
[illegible]	0.8452	0.4452	0.5010	0.0551	0.0294	0.2725	0.9093	3.2438	7.5900
-0.5647	0.8865	0.4780	0.2317	0.0700	0.0428	0.3524	1.6703	6.4725	17.3778
-0.5176	0.9606	0.5175	0.2102	0.0293	0.0203	0.1473	0.1575	1.2751	3.8011
-0.4706	0.9575	0.5314	0.2078	0.0246	0.0196	0.1223	0.0766	0.7167	-2.2512
-0.4471	0.9331	0.5335	0.1291	0.0243	0.0204	0.1213	0.0380	0.3761	-1.9560
-0.4235	0.9435	0.5516	0.2171	0.0220	0.0196	0.1073	0.0072	0.4870	-1.6478
-0.4000	0.9285	0.5538	0.1817	0.0330	0.0241	0.1751	0.1370	0.3629	1.1920
-0.3765	0.9277	0.5621	0.2047	0.0234	0.0221	0.1118	0.0330	-0.5698	-1.4378
-0.3529	0.8799	0.5442	-0.0639	0.0527	0.0296	0.2774	0.6231	1.0273	5.1753
-0.3294	0.8722	0.5385	0.1429	0.0450	0.0287	0.2193	0.3410	0.3634	1.8244
-0.3059	0.8938	0.5007	-0.1375	0.0521	0.0892	0.2285	-1.8340	0.8911	-0.0711
-0.2941	0.9349	0.4041	-0.1505	0.0697	0.1425	0.2259	-7.0268	-2.0258	0.2492
-0.2824	1.0046	0.2303	-0.1675	0.0459	0.0617	0.2020	-0.6621	1.4729	-2.4194
-0.2353	0.9982	0.1487	-0.3519	0.0509	0.0651	0.2463	-0.5731	0.6539	-1.3633
-0.2118	0.9604	0.1416	-0.4974	0.0577	0.0786	0.2552	-1.1621	-3.5659	-3.8977
-0.1882	0.9729	0.0342	-0.4939	0.0470	0.0711	0.2130	-1.1176	-1.8015	-4.3980
-0.1412	1.0232	-0.1151	-0.3212	0.0424	0.0713	0.1737	-1.3803	-1.4444	-4.4485
-0.0941	1.0558	0.1995	-0.1718	0.0411	0.0737	0.1486	-1.8628	-0.0038	-3.7889
-0.0471	1.0764	0.2481	-0.0892	0.0234	0.0307	0.1036	-0.1783	-0.4846	-1.3755
[illegible]	1.0696	-0.2289	0.0287	0.0184	0.0246	0.0814	-0.1080	-0.1503	-0.4839
[illegible]	1.0692	0.2296	-0.0205	0.0165	0.0241	0.0724	-0.1273	0.1885	-0.4769
0.0471	1.0594	0.2107	0.0553	0.0176	0.0222	0.0784	-0.0636	-0.2141	-0.5139
0.0941	1.0515	0.2120	0.1173	0.0176	0.0230	0.0798	-0.0677	-0.2273	-0.5583
0.1412	1.0471	0.2192	0.1873	0.0194	0.0244	0.0931	-0.0999	-0.1123	-0.7556
0.1647	1.0539	0.2124	0.0890	0.0280	0.0286	0.1397	0.0231	-1.0139	-2.2683
0.1882	1.0504	0.2291	0.1798	0.0286	0.0308	0.1475	0.0290	-0.8610	-2.4437
0.2118	1.0609	0.1762	0.0064	0.0510	0.0544	0.2514	-0.3952	-2.5882	-9.2798
0.2353	1.0751	-0.1634	-0.0516	0.0573	0.0637	0.2949	-0.1760	-4.6410	-12.4331
0.2824	1.0815	-0.0200	0.0842	0.0547	0.0651	0.2659	-0.3304	-3.7697	-9.6670
0.3294	1.0452	0.0900	0.1613	0.0555	0.0625	0.2610	0.6414	1.1384	-4.6515
0.3529	1.0189	0.1450	0.2313	0.0467	0.0534	0.2354	0.0941	-0.2285	1.94[illegible]
0.3765	1.0235	0.1881	0.2706	0.0419	0.0554	0.1980	-0.2938	0.8519	[illegible]
0.4000	1.0437	[illegible]	[illegible]	0.0338	0.0514	0.1404	0.6082	0.6570	[illegible]
0.4235	1.0137	[illegible]	[illegible]	0.0536	[illegible]	[illegible]	0.0519	1.9482	[illegible]
0.4471	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.8976	[illegible]
0.4706	[illegible]	[illegible]	[illegible]	0.0187	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.5176	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.5647	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Run#: 154	M 1.200	U∞=367.9 m/s
NOTE:SHARP	X 5.000 cal	α = 20 °
RPM : 0000	Y 0.188 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.0941	0.9724	0.0529	-0.1163	0.0595	0.1378	0.2645	-3.7025	-13.3248	-9.4054
-0.0471	1.0126	-0.1151	0.0178	0.0736	0.1982	0.1202	-13.5790	-2.3322	-1.7709
0.0000	1.0667	-0.2728	-0.0003	0.0186	0.0285	0.0795	-0.1657	-0.1850	-0.9139
0.0471	1.0619	-0.2738	-0.0329	0.0183	0.0245	0.0767	-0.0893	-0.3188	-0.8094
0.0941	1.0547	-0.2822	-0.0724	0.0200	0.0253	0.0902	-0.0755	-0.3598	-0.9691
0.1412	1.0570	-0.2806	-0.1646	0.0285	0.0308	0.1458	0.0670	-1.6071	-3.0670
0.1882	1.0360	-0.1293	-0.2929	0.0474	0.0791	0.1902	-1.6517	-1.9011	-4.3527
0.2353	1.0207	-0.0118	-0.3450	0.0499	0.0705	0.2162	-0.5679	-2.3361	-3.0689
0.2824	1.0075	0.1099	-0.3539	0.0531	0.0786	0.2242	-0.9930	-1.5978	-3.1917
0.3294	1.0263	0.2303	-0.3694	0.0430	0.0758	0.1748	-1.4052	-2.0591	-3.9164
0.3765	0.9751	0.4707	-0.3673	0.0215	0.0339	0.0899	-0.2844	-0.1547	-0.8134
0.4235	0.9626	0.5002	-0.3296	0.0181	0.0268	0.0820	-0.1394	-0.1106	-0.9151
0.4706	0.9570	0.5041	-0.2980	0.0165	0.0192	0.0760	0.0005	-0.3440	-0.8500
0.5647	0.9532	0.4939	-0.2203	0.0139	0.0153	0.0671	-0.0095	-0.2011	-0.6428

Run#: 145	M = 1.200	U∞=368.2 m/s
NOSE:SHARE	X = 5.000 cal	α = 20 °
RPM : 0000	Y = 0.071 cal	δ = 0 °

	VELOCITY			RMS			SHEAR STRESS		
Z(cal)	$\frac{\overline{U}}{U\infty}$	$\frac{\overline{V}}{U\infty}$	$\frac{\overline{W}}{U\infty}$	$\frac{\overline{U'}}{U\infty}$	$\frac{\overline{V'}}{U\infty}$	$\frac{\overline{W'}}{U\infty}$	$\frac{1000*\overline{U'V'}}{U\infty^2}$	$\frac{1000*\overline{V'W'}}{U\infty^2}$	$\frac{1000*\overline{W'U'}}{U\infty^2}$
-0.0471	1.0664	-0.1831	-0.2170	0.0289	0.0282	0.1380	-0.0030	-0.4486	-1.5377
0.0000	1.0507	-0.1459	-0.0752	0.0220	0.0244	0.1121	-0.0587	-0.1858	-0.7148
0.0471	1.0500	-0.1351	0.0307	0.0224	0.0242	0.1135	-0.0097	-0.4029	-0.7425
0.0941	1.0521	-0.1376	0.1072	0.0238	0.0276	0.1167	-0.0163	-0.6556	-1.0081
0.1412	1.0548	-0.1605	0.2130	0.0288	0.0348	0.1465	-0.0284	-1.4309	-2.2208
0.1882	1.0646	-0.1625	0.1863	0.0529	0.0439	0.2761	0.4358	-3.8637	-10.9874
0.2353	1.0444	-0.1107	0.2348	0.0492	0.0623	0.2264	-0.3365	0.2223	-7.5006


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